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ABSTRACT

This bulletin provides information on the occupational outlook for education and social service occupations and clergy. For each occupation, these components are described: occupation title(s); Dictionary of Occupational Titles numbers; significant points; nature of the work; working conditions; employment; training, other qualifications, and advancement; job outlook; earnings; related occupations; and sources of additional information. These occupations are addressed in alphabetical order: adult education teachers; archivists and curators; college and university faculty; counselors; education administrators; librarians; library technicians; preschool teachers and child-care workers; recreation workers; school teachers--kindergarten, elementary, and secondary; social and human service assistants; social workers; special education teachers; teacher aides; and clergy, including Protestant ministers, rabbis, and Roman Catholic priests. (YLB)

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Education and Social Service Occupations and Clergy

Reprinted from the
Occupational Outlook Handbook, 1998-99 Edition

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Bureau of Labor Statistics

February 1998

Bulletin 2500-6

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Adult Education Teachers

(D.O.T. 075.127-010; 090.222, .227-018; 097.221, .227; 099.223, .224-014, .227-014, -018, -026, -030, -038; 149.021; 150.027-014; 151.027-014; 152.021; 153.227-014; 159.227; 166.221, .227; 239.227; 375.227; 522.264; 621.221; 683.222; 689.324; 715.221; 740.221; 788.222; 789.222; 919.223; and 955.222)

Significant Points

- About half work part time; many also hold other jobs—often involving work related to the subject they teach.
- A graduate degree may be required to teach nonvocational courses, whereas practical experience is often all that is needed to teach vocational courses.
- Rising demand for adult education courses for career advancement, skills upgrading, or personal enrichment and enjoyment will spur faster-than-average employment growth; opportunities should be best for part-time positions.

Adult education teachers may lecture in classrooms or work in an industry or laboratory setting to give students hands-on experience.

Nature of the Work

Adult education teachers work in four main areas—adult vocational-technical education, adult remedial education, adult continuing education, and prebaccalaureate training. Adult vocational-technical education teachers provide instruction for occupations that do not require a college degree, such as welder, dental hygienist, automated systems manager, x-ray technician, auto mechanic, and cosmetologist. Other instructors help people update their job skills or adapt to technological advances. For example, an adult education teacher may train students how to use new computer software programs. Adult remedial education teachers provide instruction in basic education courses for school dropouts or others who need to upgrade their skills to find a job. Adult continuing education teachers teach courses which students take for personal enrichment, such as cooking, dancing, writing, exercise and physical fitness, photography, and finance. Some adult education teachers in junior or community colleges prepare students for a 4-year degree program, teaching classes for credit that can be applied towards that degree.

Adult education teachers may lecture in classrooms or work in an industry or laboratory setting to give students hands-on experience. Increasingly, adult vocational-technical education teachers integrate academic and vocational curriculums so that students obtain a variety of skills that can be applied to the "real world." For example, an electronics student may be required to take courses in principles of mathematics and science in conjunction with hands-on electronics skills. Generally, teachers demonstrate techniques, have students apply them, and critique the students' work. For example, welding instructors show students various welding techniques, including the use of tools and equipment, watch them use the techniques, and have them repeat procedures until specific standards required by the trade are met.

Increasingly, minimum standards of proficiency are being established for students in various vocational-technical fields. Adult education teachers must be aware of new standards and develop lesson plans to ensure that students meet basic criteria. Also, adult education teachers and community colleges are assuming a greater role in students' transition from school to work, by helping establish internships and providing information about prospective employers.

Businesses also are increasingly providing their employees with work-related training to keep up with changing technology. Training is often provided through contractors, professional associations, or community colleges.

Adult education teachers who instruct in adult basic education programs may work with students who do not speak English; teach adults reading, writing, and mathematics up to the 8th-grade level; or teach adults through the 12th-grade level in preparation for the General Educational Development tests (GED). The GED offers the equivalent of a high school diploma. These teachers may refer students for counseling or job placement. Because many people who need adult basic education are reluctant to seek it, teachers also may recruit participants.

Adult education teachers also prepare lessons and assignments, grade papers and do related paperwork, attend faculty and professional meetings, and stay abreast of developments in their field. (For information on vocational education teachers in secondary schools, see the *Handbook* statement on kindergarten, elementary, and secondary school teachers.)

Working Conditions

Since adult education teachers work with adult students, they do not encounter some of the behavioral or social problems sometimes found when teaching younger students. The adults are there by choice, are highly motivated, and bring years of experience to the classroom—attributes that can make teaching these students rewarding and satisfying. However, teachers in adult basic education deal with students at different levels of development who may lack effective study skills and self-confidence, and who may require more attention and patience than other students.

About 1 out of 2 adult education teachers work part time. To accommodate students who may have job or family responsibilities, many institutions offer courses at night or on weekends, which range from 2- to 4-hour workshops and 1-day mini-sessions to semester-long courses. Some adult education teachers have several part-time teaching assignments or work a full-time job in addition to their part-time teaching job, leading to long hours and a hectic schedule.

Although most adult education teachers work in a classroom setting, some are consultants to a business and teach classes at the job site.

Employment

Adult education teachers held about 559,000 jobs in 1996. Many adult education teachers are self-employed.

Adult education teachers are employed by public school systems; community and junior colleges; universities; businesses that provide formal education and training for their employees; automotive repair, bartending, business, computer, electronics, medical technology, and similar schools and institutes; dance studios; health clubs; job training centers; community organizations; labor unions; and religious organizations.

Training, Other Qualifications, and Advancement

Training requirements vary by State and by subject. In general, teachers need work or other experience in their field, and a license or certificate in fields where these usually are required for full professional status. In some cases, particularly at educational institutions, a master's or doctoral degree is required to teach nonvocational courses which can be applied towards a 4-year degree program. Many voca-

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tional teachers in junior or community colleges do not have a master's or doctoral degree but draw on their work experience and knowledge, bringing practical experience to the classroom. For general adult education classes that are taken for interest or enjoyment, an acceptable portfolio of work is required. For example, to secure a job teaching a photography course, an applicant would need to show examples of previous work.

Most States and the District of Columbia require adult basic education teachers and adult literacy instructors to have a bachelor's degree from an approved teacher training program, and some require teacher certification.

Adult education teachers update their skills through continuing education to maintain certification—requirements vary among institutions. Teachers may take part in seminars, conferences, or graduate courses in adult education or training and development, or may return to work in business or industry for a limited time. Businesses are playing a growing role in adult education, forming consortiums with training institutions and junior colleges and providing input to curriculum development. Adult education teachers maintain an ongoing dialogue with businesses to determine the most current skills required in the workplace.

Adult education teachers should communicate and relate well with students, enjoy working with them, and be able to motivate them. Adult basic education instructors, in particular, must be patient, understanding, and supportive to make students comfortable, develop trust, and help them better understand concepts.

Some teachers advance to administrative positions in departments of education, colleges and universities, and corporate training departments. These positions often require advanced degrees, such as a doctorate in adult and continuing education. (See the statement on education administrators elsewhere in the *Handbook.*)

Job Outlook

Employment of adult education teachers is expected to grow faster than the average for all occupations through the year 2006 period as the demand for adult education programs continues to rise. Opportunities should be best for part-time positions, especially in fields such as computer technology, automotive mechanics, and medical technology, which offer very attractive, and often higher-paying, job opportunities outside of teaching.

An estimated 4 out of 10 adults participated in some form of adult education in 1995. Participation in continuing education grows as the educational attainment of the population increases. Both employers and employees are realizing that life-long learning is important for success. To keep abreast of changes in their fields and advances in technology, an increasing number of adults are taking courses—often subsidized or funded entirely by employers—for career advancement or to upgrade their skills. Also, an increasing number of adults are participating in classes for personal enrichment and enjoyment. Enrollment in adult basic education and literacy programs is increasing because of changes in immigration policy that require basic competency in English and civics. And, more employers are demanding higher levels of basic academic skills— reading, writing, and arithmetic—which is increasing enrollment in remedial education and GED preparation classes.

Employment growth of adult vocational-technical education teachers will result from the need to train young adults for entry-level jobs. Experienced workers who want to switch fields or whose jobs have been eliminated due to changing technology or business reorganization also require training. Businesses are finding it essential to provide training to their workers to remain productive and globally competitive. Cooperation between businesses and educational institutions continues to increase to insure that students are taught the skills employers desire. This should result in greater demand for adult education teachers, particularly at community and junior colleges. Since adult education programs receive State and Federal funding, employment growth may be affected by government budgets.

Additional job openings for adult education teachers will stem from the need to replace persons who leave the occupation. Many teach part time and move into and out of the occupation for other jobs, family responsibilities, or to retire.

Earnings

In 1996, salaried adult education teachers who usually worked full time had median earnings around $31,300 a year. The middle 50 percent earned between $19,200 and $44,800. The lowest 10 percent earned about $13,100, while the top 10 percent earned more than $56,600. Earnings varied widely by subject, academic credentials, experience, and region of the country. Part-time instructors generally are paid hourly wages and do not receive benefits or pay for preparation time outside of class.

Related Occupations

Adult education teaching requires a wide variety of skills and aptitudes, including the ability to influence, motivate, train, and teach; organizational, administrative, and communication skills; and creativity. Workers in other occupations that require these aptitudes include other teachers, counselors, school administrators, public relations specialists, employee development specialists, and social workers.

Sources of Additional Information

Information on adult basic education programs and teacher certification requirements is available from State departments of education and local school districts.

For information about adult vocational-technical education teaching positions, contact State departments of vocational-technical education.

For information on adult continuing education teaching positions, contact departments of local government, State adult education departments, schools, colleges and universities, religious organizations, and a wide range of businesses that provide formal training for their employees.

General information on adult education is available from:

- American Association for Adult and Continuing Education, 1200 19th St. NW., Suite 300, Washington, DC 20036.
- American Vocational Association, 1410 King St., Alexandria, VA 22314.
- ERIC Clearinghouse on Adult, Career, and Vocational Education, 1900 Kenny Rd., Columbus, OH 43210-1090.

Archivists and Curators

(D.O.T. 099.167-030; 101; 102 except .261-014 and .367-010; 109.067-014, .267-010, .281, .361, .364; 979.361)

Significant Points

- Employment generally requires graduate education and substantial work experience.
- Competition for jobs is expected to be keen as qualified applicants outnumber job openings.

Nature of the Work

Archivists, curators, museum and archives technicians, and conservators search for, acquire, appraise, analyze, describe, arrange, catalogue, restore, preserve, exhibit, maintain, and store items of lasting value so that they can be used by researchers or for exhibitions, publications, broadcasting, and other educational programs. Depending on the occupation, these items may consist of historical documents, audiovisual materials, institutional records, works of art, coins, stamps, minerals, clothing, maps, living and preserved plants and animals, buildings, computer records, or historic sites.

Archivists and curators plan and oversee the arrangement, cataloguing, and exhibition of collections and, along with technicians and conservators, maintain collections. Archivists and curators may coordinate educational and public outreach programs, such as tours, workshops, lectures, and classes, and may work with the boards of institutions to administer plans and policies. They also may conduct research on topics or items relevant to their collections. Although some duties of archivists and curators are similar, the types of items they deal with differ. Curators usually handle objects found in cultural, biological, or historical collections, such as sculptures, textiles, and paintings, while archivists mainly handle valuable records,

documents, or objects that are retained because they originally accompanied and relate specifically to the document.

Archivists determine what portion of the vast amount of records maintained by various organizations, such as government agencies, corporations, or educational institutions, or by families and individuals, should be made part of permanent historical holdings, and which of these records should be put on exhibit. They maintain records in their original arrangement according to the creator's organizational scheme, and describe records to facilitate retrieval. Records may be saved on any medium, including paper, film, videotape, audiotape, electronic disk, or computer. They also may be copied onto some other format to protect the original from repeated handling, and to make them more accessible to researchers who use the records. As computers and various storage media evolve, archivists must keep abreast of technological advances in electronic information storage.

Archives may be part of a library, museum, or historical society, or may exist as a distinct archival unit within an organization or company. Archivists consider any medium containing recorded information as documents, including letters, books, and other paper documents, photographs, blueprints, audiovisual materials, and computer records. Any document which reflects organizational transactions, hierarchy, or procedures can be considered a record. Archivists often specialize in an area of history or technology so they can better determine what records in that area qualify for retention and should become part of the archives. Archivists also may work with specialized forms of records, such as manuscripts, electronic records, photographs, cartographic records, motion pictures, and sound recordings.

Computers are increasingly used to generate and maintain archival records. Professional standards for use of computers in handling archival records are still evolving. However, use of computers is expected to transform many aspects of archival collections as computer capabilities, including multimedia and worldwide web use, expand and allow more records to be stored electronically.

Curators oversee collections in museums, zoos, aquariums, botanic gardens, nature centers, and historic sites. They acquire items through purchases, gifts, field exploration, intermuseum exchanges, or, in the case of some plants and animals, reproduction. Curators also plan and prepare exhibits. In natural history museums, curators collect and observe specimens in their natural habitat. Their work involves describing and classifying species, while specially trained collection managers and technicians provide hands-on care of natural history collections. Most curators use computer databases to catalogue and organize their collections. Many also use the Internet to make information available to other curators and the public. Increasingly, curators are expected to participate in grant writing and fund raising to support their projects.

Most curators specialize in a specific field, such as botany, art, paleontology, or history. Those working in large institutions may be highly specialized. A large natural history museum, for example, would employ specialists in birds, fishes, insects, and mollusks. Some curators maintain the collection, others do research, and others perform administrative tasks. Registrars, for example, keep track of and move objects in the collection. In small institutions, with only one or a few curators, one curator may be responsible for multiple tasks, from maintaining collections to directing the affairs of museums.

Conservators manage, care for, preserve, treat, and document works of art, artifacts, and specimens. This may require substantial historical, scientific, and archaeological research. They use x rays, chemical testing, microscopes, special lights, and other laboratory equipment and techniques to examine objects and determine their condition, the need for treatment or restoration, and the appropriate method for preservation. They then document their findings and treat items to minimize deterioration or restore items to their original state. Conservators usually specialize in a particular material or group of objects, such as documents and books, paintings, decorative arts, textiles, metals, or architectural material.

Museum directors formulate policies, plan budgets, and raise funds for their museums. They coordinate activities of their staff to establish and maintain collections. As their role has evolved, museum directors increasingly need business backgrounds in addition to an understanding and empathy for the subject matter of their collections.

Archivists and curators plan and oversee the arrangement, maintenance, and exhibition of museum collections.

Museum technicians assist curators and conservators by performing various preparatory and maintenance tasks on museum items. Some museum technicians may also assist curators with research. Archives technicians help archivists organize, maintain, and provide access to historical documentary materials.

Working Conditions

The working conditions of archivists and curators vary. Some spend most of their time working with the public, providing reference assistance and educational services. Others perform research or process records, which often means working alone or in offices with only a few people. Those who restore and install exhibits or work with bulky, heavy record containers may climb, stretch, or lift. Those in zoos, botanical gardens, and other outdoor museums or historic sites frequently walk great distances.

Curators who work in large institutions may travel extensively to evaluate potential additions to the collection, organize exhibitions, and conduct research in their area of expertise. However, in small institutions, travel for curators is rare.

Employment

Archivists and curators held about 20,000 jobs in 1996. About a quarter were employed in museums, botanical gardens, and zoos, and approximately 2 in 10 worked in educational services, mainly in college and university libraries. About 4 in 10 worked in Federal, State,

and local government. Most Federal archivists work for the National Archives and Records Administration; others manage military archives in the Department of Defense. Most Federal Government curators work at the Smithsonian Institution, in the military museums of the Department of Defense, and in archaeological and other museums managed by the Department of Interior. All State governments have archival or historical records sections employing archivists. State and local governments have numerous historical museums, parks, libraries, and zoos employing curators.

Some large corporations have archives or records centers, employing archivists to manage the growing volume of records created or maintained as required by law or necessary to the firms' operations. Religious and fraternal organizations, professional associations, conservation organizations, major private collectors, and research firms also employ archivists and curators.

Conservators may work under contract to treat particular items, rather than as a regular employee of a museum or other institution. These conservators may work on their own as private contractors, or as an employee of a conservation laboratory or regional conservation center which contracts their services to museums.

Training, Other Qualifications, and Advancement

Employment as an archivist, conservator, or curator generally requires graduate education and substantial work experience. Many archivists and curators work in archives or museums while completing their formal education, to gain the "hands-on" experience that many employers seek when hiring.

Employers generally look for archivists with undergraduate and graduate degrees in history or library science, with courses in archival science. Some positions may require knowledge of the discipline related to the collection, such as business or medicine. An increasing number of archivists have a double master's degree in history and library science. There are currently no programs offering a bachelor's or master's degree in archival science. However, approximately 65 colleges and universities offer courses or practical training in archival science as part of history, library science, or another discipline. The Academy of Certified Archivists offers voluntary certification for archivists. Certification requires the applicant to have experience in the field and to pass an examination offered by the Academy.

Archivists need research and analytical ability to understand the content of documents and the context in which they were created, and to decipher deteriorated or poor quality printed matter, handwritten manuscripts, or photographs and films. A background in preservation management is often required of archivists since they are responsible for taking proper care of their records. Archivists also must be able to organize large amounts of information and write clear instructions for its retrieval and use. In addition, computer skills and the ability to work with electronic records and databases are increasingly important.

Many archives are very small, including one-person shops, with limited promotion opportunities. Archivists typically advance by transferring to a larger unit with supervisory positions. A doctorate in history, library science, or a related field may be needed for some advanced positions, such as director of a State archives.

In most museums, a master's degree in an appropriate discipline of the museum's specialty—for example, art, history, or archaeology—or museum studies is required for employment as a curator. Many employers prefer a doctoral degree, particularly for curators in natural history or science museums. Earning two graduate degrees—in museum studies (museology) and a specialized subject—gives a candidate a distinct advantage in this competitive job market. In small museums, curatorial positions may be available to individuals with a bachelor's degree. For some positions, an internship of full-time museum work supplemented by courses in museum practices is needed.

Curatorial positions often require knowledge in a number of fields. For historic and artistic conservation, courses in chemistry, physics, and art are desirable. Since curators—particularly those in small museums—may have administrative and managerial responsibilities, courses in business administration, public relations, marketing, and fundraising also are recommended. Similar to archivists, curators need computer skills and the ability to work with electronic databases. Curators also need to be familiar with digital imaging, scanning technology, and copyright infringement, since many are responsible for posting information on the Internet.

Curators must be flexible because of their wide variety of duties. They need an aesthetic sense to design and present exhibits and, in small museums, manual dexterity to erect exhibits or restore objects. Leadership ability and business skills are important for museum directors, while marketing skills are valuable for increasing museum attendance and fundraising.

In large museums, curators may advance through several levels of responsibility, eventually to museum director. Curators in smaller museums often advance to larger ones. Individual research and publications are important for advancement in larger institutions.

Museum technicians generally need a bachelor's degree in an appropriate discipline of the museum's specialty, museum studies training, or previous museum work experience, particularly in exhibit design. Similarly, archives technicians generally need a bachelor's degree in library science or history, or relevant work experience. Technician positions often serve as a stepping stone for individuals interested in archival and curatorial work. With the exception of small museums, a master's degree is needed for advancement.

When hiring conservators, employers look for a master's degree in conservation, or in a closely related field, and substantial experience. There are only a few graduate programs in museum conservation techniques in the United States. Competition for entry to these programs is keen; to qualify, a student must have a background in chemistry, archaeology or studio art, and art history, as well as work experience. For some programs, knowledge of a foreign language is also helpful. Conservation apprenticeships or internships as an undergraduate can also enhance one's admission prospects. Graduate programs last 2 to 4 years; the latter years include internship training. A few individuals enter conservation through apprenticeships with museums, nonprofit organizations, and conservators in private practice. Apprenticeships should be supplemented with courses in chemistry, studio art, and history. Apprenticeship training, although accepted, generally is a more difficult route into the conservation profession.

Relatively few schools grant a bachelor's degree in museum studies. More common are undergraduate minors or tracks of study that are part of an undergraduate degree in a related field, such as art history, history, or archaeology. Students interested in further study may obtain a master's degree in museum studies. Colleges and universities throughout the country offer master's degrees in museum studies. However, many employers feel that, while museum studies are helpful, a thorough knowledge of the museum's specialty and museum work experience are more important.

Continuing education, which enables archivists, curators, conservators, and museum technicians to keep up with developments in the field, is available through meetings, conferences, and workshops sponsored by archival, historical, and museum associations. Some larger organizations, such as the National Archives, offer such training in-house.

Job Outlook

Competition for jobs as archivists and curators is expected to be keen as qualified applicants outnumber job openings. Graduates with highly specialized training, such as master's degrees in both library science and history, with a concentration in archives or records management, and extensive computer skills should have the best opportunities for jobs as archivists. A job as a curator is attractive to many people, and many applicants have the necessary training and subject knowledge; yet there are only a few openings. Consequently, candidates may have to work part time, as an intern, or even as a volunteer assistant curator or research associate after completing their formal education. Substantial work experience in collection management, exhibit design, or restoration, as well as database management skills, will be necessary for permanent status. Job opportunities for curators should be best in art and history museums, since these are the largest employers in the museum industry.

The job outlook for conservators may be more favorable, particularly for graduates of conservation programs. However, competition is stiff for the limited number of openings in these programs, and applicants need a technical background. Students who qualify and successfully complete the program, have knowledge of a foreign language, and are willing to relocate, will have an advantage over less qualified candidates in obtaining a position.

Employment of archivists and curators is expected to increase about as fast as the average for all occupations through the year 2006. Jobs are expected to grow as public and private organizations put more emphasis on establishing archives and organizing records and information, and as public interest in science, art, history, and technology increases. However, museums and other cultural institutions are often subject to funding cuts during recessions or periods of budget tightening, reducing demand for archivists and curators during these times. Although the rate of turnover among archivists and curators is relatively low, the need to replace workers who leave the occupation or stop working will create some additional job openings.

Earnings

Earnings of archivists and curators vary considerably by type and size of employer, and often by specialty. Average salaries in the Federal Government, for example, are generally higher than those in religious organizations. Salaries of curators in large, well-funded museums may be several times higher than those in small ones.

The average annual salary for all museum curators in the Federal Government in nonsupervisory, supervisory, and managerial positions was about $55,000 in 1997. Archivists averaged $53,600; museum specialists and technicians, $36,300; and archives technicians, $31,200.

According to a survey by the Association of Art Museum Directors, median salaries for selected workers in larger art museums in 1996 were as follows:

Director	$103,000
Curator	50,000
Senior conservator	48,500
Curatorial assistant	22,600

Related Occupations

Archivists' and curators' skills in preserving, organizing, and displaying objects or information of historical interest are shared by anthropologists, arborists, archaeologists, artifacts conservators, botanists, ethnologists, folklorists, genealogists, historians, horticulturists, information specialists, librarians, paintings restorers, records managers, and zoologists.

Sources of Additional Information

For information on archivists and on schools offering courses in archival studies, contact:

☛ Society of American Archivists, 600 South Federal St., Suite 504, Chicago, IL 60605.

For general information about careers as a curator and schools offering courses in museum studies, contact:

☛ American Association of Museums, 1575 I St. NW., Suite 400, Washington, DC 20005.

For information about conservation and preservation careers and education programs, contact:

☛ American Institute for Conservation of Historic and Artistic Works, 1717 K St. NW., Suite 301, Washington, DC 20006.

College and University Faculty

(D.O.T. 090.227-010)

Significant Points

- A Ph.D. is generally required for full-time positions in 4-year colleges and universities; in 2-year institutions, master's degree holders may qualify.
- Applicants for full-time college faculty positions face keen competition because many colleges and universities, in an effort to cut costs, will hire more part-time faculty.
- Job prospects will continue to be better in certain fields—computer science, engineering, and business, for example—that offer attractive nonacademic job opportunities and attract fewer applicants for academic positions.

Nature of the Work

College and university faculty teach and advise nearly 15 million full- and part-time college students and perform a significant part of our Nation's research. They also study and meet with colleagues to keep up with developments in their field and consult with government, business, nonprofit, and community organizations.

Faculty generally are organized into departments or divisions, based on subject or field. They usually teach several different courses in their department—algebra, calculus, and statistics, for example. They may instruct undergraduate or graduate students, or both. College and university faculty may give lectures to several hundred students in large halls, lead small seminars, or supervise students in laboratories. They prepare lectures, exercises, and laboratory experiments, grade exams and papers, and advise and work with students individually. In universities, they also counsel, advise, teach, and supervise graduate student teaching and research. College faculty work with an increasingly varied student population made up of growing shares of part-time, older, and culturally and racially diverse students.

Faculty keep abreast of developments in their field by reading current literature, talking with colleagues, and participating in professional conferences. They also do their own research to expand knowledge in their field. They experiment, collect and analyze data, and examine original documents, literature, and other source material. From this, they develop hypotheses, arrive at conclusions, and publish their findings in scholarly journals, books, and electronic media.

College and university faculty increasingly use technology in all areas of their work. In the classroom, they may use computers—including the Internet; electronic mail; software programs, such as statistical packages; and CD-ROMs—as teaching aids. Some professors teach "satellite" courses that are broadcast to students at off-campus sites through closed-circuit or cable television. Faculty also use computers to do their own research, participate in discussion groups in their field, or publicize their professional research papers.

Most faculty members serve on academic or administrative committees which deal with the policies of their institution, departmental matters, academic issues, curricula, budgets, equipment purchases, and hiring. Some work with student as well as community organizations. Department chairpersons are faculty members who usually teach some courses but generally have heavier administrative responsibilities.

The proportion of time spent on research, teaching, administrative, and other duties varies by individual circumstance and type of institution. Faculty members at universities generally spend a significant part of their time doing research; those in 4-year colleges, somewhat less; and those in 2-year colleges, relatively little. However, the teaching load usually is heavier in 2-year colleges and somewhat lower at 4-year institutions. Full professors at all types of institutions usually spend a larger portion of their time conducting research than assistant professors, instructors, and lecturers.

Working Conditions

College faculty generally have flexible schedules. They must be present for classes, usually 12 to 16 hours a week, and for faculty and committee meetings. Most establish regular office hours for student consultations, usually 3 to 6 hours per week. Otherwise, faculty are free to decide when and where they will work, and how much time to devote to course preparation, grading papers and exams, study, research, graduate student supervision, and other activities. Initial adjustment to these responsibilities can be challenging as new faculty adapt to switching roles from

College and university faculty teach, conduct research, and write scholarly papers.

student to teacher. This adjustment may be even more difficult as class size grows in response to faculty and budget cutbacks, increasing an instructor's workload. Also, many institutions are increasing their reliance on part-time faculty, who generally have limited administrative and student advising duties, which leaves the declining number of full-time faculty with a heavier workload.

Some faculty members work staggered hours and teach classes at night and on weekends. This is particularly true for faculty who teach at 2-year community colleges or institutions with large enrollments of older students with full-time jobs or family responsibilities on weekdays. Most faculty are employed on a 9-month contract, which allows them the time to teach, do research, travel, or pursue nonacademic interests during the summer and school holidays. Most colleges and universities have funds to support faculty research or other professional development needs, including travel to conferences and research sites.

Faculty may experience a conflict between their responsibilities to teach students and the pressure to do research and publish their findings. This may be a particular problem for young faculty seeking advancement in 4-year research universities. Increasing emphasis on undergraduate teaching performance in tenure decisions may alleviate some of this pressure, however.

Part-time faculty generally spend little time on campus, because they usually don't have an office. In addition, they may teach at more than one college, requiring travel between their various places of employment, earning the name "gypsy faculty." Part-time faculty are usually not eligible for tenure. Dealing with this lack of job security can be stressful.

Employment

College and university faculty held about 864,000 jobs in 1996, mostly in public institutions.

About 4 out of 10 college and university faculty worked part time in 1996. Some part-timers, known as "adjunct faculty," have primary jobs outside of academia—in government, private industry, or in nonprofit research—and teach "on the side." Others seek full-time jobs but are unable to obtain them due to intense competition for available openings. Some work part time in more than one institution.

Training, Other Qualifications, and Advancement

Most college and university faculty are in four academic ranks: Professor, associate professor, assistant professor, and instructor. These positions are usually considered to be tenure-track positions. A small number of faculty, called lecturers, usually are not on the tenure track.

Most faculty members are hired as instructors or assistant professors. Four-year colleges and universities generally only consider doctoral degree holders for full-time, tenure-track positions, but may hire master's degree holders or doctoral candidates for certain disciplines, such as the arts, or for part-time and temporary jobs. In 2-year colleges, master's degree holders often qualify for full-time positions. However, with increasing competition for available jobs, institutions can be more selective in their hiring practices. Master's degree holders may find it increasingly difficult to obtain employment as they are passed over in favor of candidates holding a Ph.D.

Doctoral programs, including time spent completing a master's degree and a dissertation, take an average of 6 to 8 years of full-time study beyond the bachelor's degree. Some programs, such as the humanities, take longer to complete; others, such as engineering, generally are shorter. Candidates usually specialize in a subfield of a discipline—for example, organic chemistry, counseling psychology, or European history—but also take courses covering the entire discipline. Programs include 20 or more increasingly specialized courses and seminars plus comprehensive examinations on all major areas of the field. Candidates also must complete a dissertation—a written report on original research in the candidate's major field of study. The dissertation sets forth an original hypothesis or proposes a model and tests it. Students in the natural sciences and engineering usually do laboratory work; in the humanities, they study original documents and other published material. The dissertation, done under the guidance of one or more faculty advisors, usually takes 1 or 2 years of full-time work.

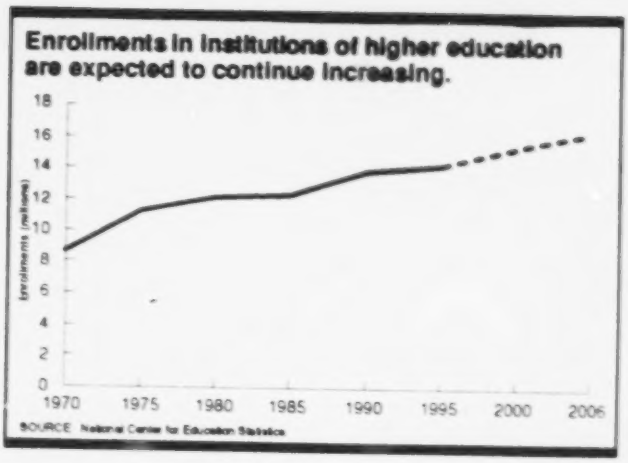
In some fields, particularly the natural sciences, some students spend an additional 2 years on postdoctoral research and study before taking a faculty position. Some Ph.D.'s extend or take new postdoctoral appointments if they are unable to find a faculty job. Most of these appointments offer a nominal salary.

A major step in the traditional academic career is attaining tenure. New tenure-track faculty are usually hired as instructors or assistant professors, and must serve a certain period (usually 7 years) under term contracts. At the end of the contract period, their record of teaching, research, and overall contribution to the institution is reviewed; tenure is granted if the review is favorable. According to the American Association of University Professors, in 1995-96 about 65 percent of all full-time faculty held tenure while 88 percent were in tenure-track positions. Those denied tenure usually must leave the institution. Tenured professors cannot be fired without just cause and due process. Tenure protects the faculty's academic freedom—the ability to teach and conduct research without fear of being fired for advocating unpopular ideas. It also gives both faculty and institutions the stability needed for effective research and teaching, and provides financial security for faculty. Some institutions have adopted post-tenure review policies to encourage ongoing evaluation of tenured faculty.

The number of tenure-track positions is expected to decline as institutions rely more heavily on less costly part-time faculty who do not hold tenure-track positions. Consequently, increased reliance on part-time faculty is expected to shrink the total pool of faculty who hold tenure. Some institutions have placed "caps" on the percentage of faculty who can be tenured. Other institutions offer prospective faculty limited term contracts—typically 2-, 3-, or 5-year, full-time contracts—in an effort to adapt to changes in the budget and the size of the student body. These contracts may be terminated or extended at the end of the period. Institutions are not obligated to grant tenure to these contract holders.

Some faculty—based on teaching experience, research, publication, and service on campus committees and task forces—move into administrative and managerial positions, such as departmental chairperson, dean, and president. At 4-year institutions, such advancement requires a doctoral degree. At 2-year colleges, a doctorate is helpful but not generally required, except for advancement to some top administrative positions. (Deans and departmental chairpersons are covered in the *Handbook* statement on education administrators, while college presidents are included in the *Handbook* statement on general managers and top executives.)

College faculty should have inquiring and analytical minds, and a strong desire to pursue and disseminate knowledge. They must be able to communicate clearly and logically, both orally and in writing. They should be able to establish rapport with students and, as models for them, be dedicated to the principles of academic integrity and intellectual honesty. Additionally, they must be self-motivated and able to work in an environment where they receive little direct supervision.



Job Outlook

Employment of college and university faculty is expected to increase about as fast as the average for all occupations through the year 2006 as enrollments in higher education increase. Many additional openings will arise as faculty members retire. Faculty retirements should increase significantly from the late 1990s through 2006 as a large number of faculty who entered the profession during the 1950s and 1960s reach retirement age. Most faculty members likely to retire are full-time tenured professors. However, in an effort to cut costs, some institutions are expected to either leave these positions vacant or hire part-time, non-tenured faculty as replacements. Prospective job applicants should be prepared to face keen competition for available jobs as growing numbers of Ph.D. graduates, including foreign-born Ph.D.'s, vie for fewer full-time openings. As more and more Ph.D.'s compete for openings, master's degree holders may find competition for jobs even more intense.

Enrollments in institutions of higher education increased in the mid-1980s through the early 1990s despite a decline in the traditional college-age (18-24) population. This resulted from a higher proportion of 18- to 24-year-olds attending college, along with a growing number of part-time, female, and older students. Between 1996 and 2006, the traditional college-age population will begin to grow again, spurred by the leading edge of the baby-boom "echo" generation (children of the baby-boomers) reaching college age. College enrollment is projected to rise from 14 million in 1996 to 16 million in 2006, an increase of 14 percent (see accompanying chart).

In the past two decades, keen competition for faculty jobs forced some applicants to accept part-time or short-term academic appointments that offered little hope of tenure, and others to seek nonacademic positions. This trend of hiring adjunct or part-time faculty is likely to continue due to financial difficulties faced by colleges and universities. Many colleges, faced with reduced State funding for higher education, have increased the hiring of part-time faculty to save money on pay and benefits. Public 2-year colleges employ a significantly higher number of part-time faculty as a percentage of their total staff than public 4-year colleges and universities, but all institutions have increased their part-time hiring. With uncertainty over future funding, many colleges and universities are continuing to cut costs by eliminating some academic programs, increasing class size, and closely monitoring all expenses.

Once enrollments and retirements start increasing at a faster pace in the late 1990s, opportunities for college faculty may begin to improve somewhat. Growing numbers of students will necessitate hiring more faculty to teach. At the same time, many faculty will be retiring, opening up even more positions. Job prospects will continue to be better in certain fields—business, engineering, health science, and computer science, for example—that offer attractive nonacademic job opportunities and attract fewer applicants for academic positions.

Employment of college faculty is affected by the nonacademic job market. Excellent job prospects in a field—for example, computer science from the late 1970s to the mid-1980s—cause more students to enroll, increasing faculty needs in that field. On the other hand, poor job prospects in a field, such as history in recent years, discourages students and reduces demand for faculty.

Earnings

Earnings vary according to faculty rank and type of institution, geographic area, and field. According to a 1995-96 survey by the American Association of University Professors, salaries for full-time faculty averaged $51,000. By rank, the average for professors was $65,400; associate professors, $48,300; assistant professors, $40,100; instructors, $30,800; and lecturers, $33,700. Faculty in 4-year institutions earn higher salaries, on the average, than those in 2-year schools. Average salaries for faculty in public institutions—$50,400—were lower in 1995-96 than those for private independent institutions—$57,500—but higher than those for religion-affiliated private institutions—$45,200. In fields with high-paying nonacademic alternatives—notably medicine and law but also engineering and business, among others—earnings exceed these averages. In others—such as the humanities and education—they are lower.

Most faculty members have significant earnings in addition to their base salary, from consulting, teaching additional courses, research, writing for publication, or other employment, both during the academic year and the summer.

Most college and university faculty enjoy some unique benefits, including access to campus facilities, tuition waivers for dependents, housing and travel allowances, and paid sabbatical leaves. Part-time faculty have fewer benefits than full-time faculty, and usually do not receive health insurance, retirement benefits, or sabbatical leave.

Related Occupations

College and university faculty function both as teachers and researchers. They communicate information and ideas. Related occupations include elementary and secondary school teachers, librarians, writers, consultants, lobbyists, trainers and employee development specialists, and policy analysts. Faculty research activities often are similar to those of scientists, as well as managers and administrators in industry, government, and nonprofit research organizations.

Sources of Additional Information

Professional societies generally provide information on academic and nonacademic employment opportunities in their fields. Names and addresses of these societies appear in statements elsewhere in the *Handbook*.

Special publications on higher education, available in libraries, such as *The Chronicle of Higher Education*, list specific employment opportunities for faculty.

Counselors

(D.O.T. 045.107-010, -014, -018, -038, -042, -050, -054, -058, 117.090-107, 094.107-010, and 169.267-026)

Significant Points

- About 6 out of 10 counselors have a master's degree.
- Rapid job growth is expected among rehabilitation and mental health counselors; however, budgetary constraints may limit growth among school counselors, and employment counselors working in government.

Nature of the Work

Counselors assist people with personal, family, educational, mental health, and career decisions and problems. Their duties depend on the individuals they serve and the settings in which they work.

School and college counselors—who work at the elementary, middle, secondary, and postsecondary school levels—help students evaluate their abilities, interests, talents, and personality characteris-

ties so that students can develop realistic academic and career goals. Counselors use interviews, counseling sessions, tests, or other methods when evaluating and advising students. They may operate career information centers and career education programs. High school counselors advise on college majors, admission requirements, entrance exams, and financial aid, and on trade, technical school, and apprenticeship programs. They help students develop jobfinding skills such as resume writing and interviewing techniques. College career planning and placement counselors assist alumni or students with career development and job hunting techniques.

Elementary school counselors observe younger children during classroom and play activities and confer with their teachers and parents to evaluate their strengths, problems, or special needs. They also help students develop good study habits. They do less vocational and academic counseling than secondary school counselors.

School counselors at all levels help students understand and deal with their social, behavioral, and personal problems. They emphasize preventive and developmental counseling to provide students with the life skills needed to deal with problems before they occur, and to enhance personal, social, and academic growth. Counselors provide special services, including alcohol and drug prevention programs, and classes that teach students to handle conflicts without resorting to violence. Counselors also try to identify cases involving domestic abuse and other family problems that can affect a student's development. Counselors work with students individually, in small groups, or with entire classes. They consult and work with parents, teachers, school administrators, school psychologists, school nurses, and social workers.

Rehabilitation counselors help people deal with the personal, social, and vocational effects of their disabilities. They may counsel people with disabilities resulting from birth defects, illness or disease, accidents, or the stress of daily life. They evaluate the strengths and limitations of individuals, provide personal and vocational counseling, and may arrange for medical care, vocational training, and job placement. Rehabilitation counselors interview individuals with disabilities and their families, evaluate school and medical reports, and confer and plan with physicians, psychologists, occupational therapists, and employers to determine the capabilities and skills of the individual. Conferring with the client, they develop a rehabilitation program, which may include training to help the person develop job skills. They also work toward increasing the client's capacity to live independently.

Employment counselors help individuals make wise career decisions. They explore and evaluate the client's education, training, work history, interests, skills, and personal traits, and may arrange for aptitude and achievement tests. They also work with individuals to develop jobseeking skills and assist clients in locating and applying for jobs.

Mental health counselors emphasize prevention and work with individuals and groups to promote optimum mental health. They help individuals deal with addictions and substance abuse, suicide, stress management, problems with self-esteem, issues associated with aging, job and career concerns, educational decisions, issues of mental and emotional health, and family, parenting, and marital problems. Mental health counselors work closely with other mental health specialists, including psychiatrists, psychologists, clinical social workers, psychiatric nurses, and school counselors. (Information on other mental health specialists appears in the *Handbook* statements on physicians, psychologists, registered nurses, and social workers.)

Other counseling specialties include marriage and family, multicultural, or gerontological counseling. A gerontological counselor provides services to elderly persons who face changing lifestyles due to health problems, and helps families cope with these changes. A multicultural counselor helps employers adjust to an increasingly diverse workforce.

Working Conditions

Most school counselors work the traditional 9- to 10-month school year with a 2- to 3-month vacation, although an increasing number are employed on 10 1/2- or 11-month contracts. They generally have the same hours as teachers. College career planning and placement counselors may work long and irregular hours during recruiting periods.

School counselors use interviews, counseling sessions, and tests to evaluate and advise students.

Rehabilitation and employment counselors generally work a standard 40-hour week. Self-employed counselors and those working in mental health and community agencies often work evenings to counsel clients who work during the day.

Counselors must possess high physical and emotional energy to handle the array of problems they address. Dealing with these day-to-day problems can cause stress and emotional burnout.

Since privacy is essential for confidential and frank discussions with clients, counselors usually have private offices.

Employment

Counselors held about 175,000 jobs in 1996. (This employment estimate only includes vocational and educational counselors; employment data are not available for other counselors discussed in this statement, such as rehabilitation and mental health counselors.)

In addition to elementary and secondary schools and colleges and universities, counselors work in a wide variety of public and private establishments. These include health care facilities; job training, career development, and vocational rehabilitation centers; social agencies; correctional institutions; and residential care facilities, such as halfway houses for criminal offenders and group homes for children, the aged, and the disabled. Counselors also work in organizations engaged in community improvement and social change, as well as drug and alcohol rehabilitation programs and State and local government agencies. A growing number of counselors work in health maintenance organizations, insurance companies, group practice, and private practice. This growth has been spurred by laws allowing counselors to receive payments from insurance companies, and requiring employers to provide rehabilitation and counseling services to employees.

Training, Other Qualifications, and Advancement

Recent data indicate that 6 out of 10 counselors have a master's degree; fields of study include college student affairs, elementary or secondary school counseling, education, gerontological counseling, marriage and family counseling, substance abuse counseling, rehabilitation counseling, agency or community counseling, clinical mental health counseling, counseling psychology, career counseling, or a related field.

Graduate-level counselor education programs in colleges and universities usually are in departments of education or psychology.Courses are grouped into eight core areas: Human growth and development; social and cultural foundations; helping relationships; groups; lifestyle and career development; appraisal; research and evaluation; and professional orientation. In an accredited program, 48 to 60 semester hours of graduate study, including a period of supervised clinical experience in counseling, are required for a master's degree. In 1996, 111 institutions offered programs in counselor education, including career, community, gerontological, mental health, school, student affairs, and marriage and family counseling, accredited by the Council for Ac-

creditation of Counseling and Related Educational Programs (CACREP).

In 1997, 42 States and the District of Columbia had some form of counselor credentialing legislation, licensure, certification, or registry for practice outside schools. Requirements vary from State to State. In some States, credentialing is mandatory; in others, voluntary.

Many counselors elect to be nationally certified by the National Board for Certified Counselors (NBCC), which grants the general practice credential, "National Certified Counselor." To be certified, a counselor must hold a master's degree in counseling from a regionally accredited institution, have at least 2 years of supervised professional counseling experience, and pass NBCC's National Counselor Examination for Licensure and Certification. This national certification is voluntary and distinct from State certification. However, in some States those who pass the national exam are exempt from taking a State certification exam. NBCC also offers specialty certification in career, gerontological, school, clinical mental health, and addictions counseling. To maintain their certification, counselors must complete 100 hours of acceptable continuing education credit every 5 years.

All States require school counselors to hold State school counseling certification; however, certification requirements vary from State to State. Some States require public school counselors to have both counseling and teaching certificates. Depending on the State, a master's degree in counseling and 2 to 5 years of teaching experience may be required for a counseling certificate.

Vocational and related rehabilitation agencies generally require a master's degree in rehabilitation counseling, counseling and guidance, or counseling psychology for rehabilitation counselor jobs. Some, however, may accept applicants with a bachelor's degree in rehabilitation services, counseling, psychology, sociology, or related fields. A bachelor's degree may qualify a person to work as a counseling aide, rehabilitation aide, or social service worker. Experience in employment counseling, job development, psychology, education, or social work may be helpful.

The Council on Rehabilitation Education (CORE) accredits graduate programs in rehabilitation counseling. A minimum of 2 years of study—including 600 hours of supervised clinical internship experience—are required for the master's degree.

In most State vocational rehabilitation agencies, applicants must pass a written examination and be evaluated by a board of examiners to obtain licensure. In addition, many employers require rehabilitation counselors to be nationally certified. To become certified by the Commission on Rehabilitation Counselor Certification, counselors must graduate from an accredited educational program, complete an internship, and pass a written examination. They are then designated as "Certified Rehabilitation Counselors." To maintain their certification, counselors must complete 100 hours of acceptable continuing education credit every 5 years.

Some States require counselors in public employment offices to have a master's degree; others accept a bachelor's degree with appropriate counseling courses.

Clinical mental health counselors generally have a master's degree in mental health counseling, another area of counseling, or in psychology or social work. They are voluntarily certified by the National Board for Certified Counselors. Generally, to receive certification as a clinical mental health counselor, a counselor must have a master's degree in counseling, 2 years of post-master's experience, a period of supervised clinical experience, a taped sample of clinical work, and a passing grade on a written examination.

Some employers provide training for newly hired counselors. Many have work-study programs so that employed counselors can earn graduate degrees. Counselors must participate in graduate studies, workshops, institutes, and personal studies to maintain their certificates and licenses.

Persons interested in counseling should have a strong interest in helping others and the ability to inspire respect, trust, and confidence. They should be able to work independently or as part of a team. Counselors follow the code of ethics associated with their respective certifications and licenses.

Prospects for advancement vary by counseling field. School counselors may move to a larger school; become directors or supervisors of counseling, guidance, or pupil personnel services; or, usually with further graduate education, become counselor educators, counseling psychologists, or school administrators. (See the statements on psychologists and education administrators elsewhere in the *Handbook*.) Some counselors also may advance to work at the State department of education.

Rehabilitation, mental health, and employment counselors may become supervisors or administrators in their agencies. Some counselors move into research, consulting, or college teaching, or go into private or group practice.

Job Outlook

Overall employment of counselors is expected to grow about as fast as the average for all occupations through the year 2006. In addition, replacement needs should increase significantly as a large number of counselors reach retirement age.

Employment of school and vocational counselors is expected to grow as a result of increasing enrollments, particularly in secondary and postsecondary schools, State legislation requiring counselors in elementary schools, and the expanded responsibilities of counselors. Counselors are becoming more involved in crisis and preventive counseling, helping students deal with issues ranging from drug and alcohol abuse to death and suicide. Also, the growing diversity of student populations is presenting challenges to counselors in dealing with multicultural issues. Job growth among counselors, however, may be dampened by budgetary constraints. High student-to-counselor ratios in many schools could increase even more as student enrollments grow. When funding is tight, schools usually prefer to hire new teachers before adding counselors in an effort to keep classroom sizes at acceptable levels.

Rapid job growth is expected among rehabilitation and mental health counselors. Under managed care systems, insurance companies increasingly provide for reimbursement of counselors, enabling many counselors to move from schools and government agencies to private practice. Counselors are also forming group practices to receive expanded insurance coverage. The number of people who need rehabilitation services will rise as advances in medical technology continue to save lives that only a few years ago would have been lost. In addition, legislation requiring equal employment rights for people with disabilities will spur demand for counselors. Counselors not only will help individuals with disabilities with their transition into the work force, but also will help companies comply with the law. Employers are also increasingly offering employee assistance programs which provide mental health and alcohol and drug abuse services. A growing number of people are expected to use these services as the elderly population grows, and as society focuses on ways of developing mental well-being, such as controlling stress associated with job and family responsibilities.

As with other government jobs, the number of employment counselors, who work primarily for State and local government, could be limited by budgetary constraints. However, demand for government employment counseling may grow as new welfare laws require welfare recipients to find jobs. Opportunities for employment counselors working in private job training services should grow as counselors provide skill training and other services to laid-off workers, experienced workers seeking a new or second career, full-time homemakers seeking to enter or reenter the work force, and workers who want to upgrade their skills.

Earnings

Median earnings for full-time educational and vocational counselors were about $35,800 a year in 1996. The middle 50 percent earned between $25,600 and $48,500 a year. The bottom 10 percent earned less than $18,600 a year, while the top 10 percent earned over $60,100 a year.

According to the Educational Research Service, the average salary of public school counselors in the 1995-96 academic year was about $44,100. Many school counselors are compensated on the same pay scale as teachers. School counselors can earn additional income working summers in the school system or in other jobs.

Self-employed counselors who have well-established practices, as well as counselors employed in group practices, generally have the highest earnings, as do some counselors working for private firms, such as insurance companies and private rehabilitation companies.

Related Occupations
Counselors help people evaluate their interests, abilities, and disabilities, and deal with personal, social, academic, and career problems. Others who help people in similar ways include college and student affairs workers, teachers, personnel workers and managers, human services workers, social workers, psychologists, psychiatrists, psychiatric nurses, members of the clergy, occupational therapists, training and employee development specialists, and equal employment opportunity/affirmative action specialists.

Sources of Additional Information
For general information about counseling, as well as information on specialties such as school, college, mental health, rehabilitation, multicultural, career, marriage and family, and gerontological counseling, contact:

☛ American Counseling Association, 5999 Stevenson Ave., Alexandria, VA 22304.

For information on accredited counseling and related training programs, contact:

☛ Council for Accreditation of Counseling and Related Educational Programs, American Counseling Association, 5999 Stevenson Ave., Alexandria, VA 22304.

For information on national certification requirements for counselors, contact:

☛ National Board for Certified Counselors, 3 Terrace Way, Suite D, Greensboro, NC 27403. Homepage: http://www.nbcc.org/

For information on certification requirements for rehabilitation counselors and a list of accredited rehabilitation education programs, contact:

☛ Council on Rehabilitation Counselor Certification, 1835 Rohlwing Rd., Suite E, Rolling Meadows, IL 60008.

State departments of education can supply information on colleges and universities that offer approved guidance and counseling training for State certification and licensure requirements.

State employment service offices have information about job opportunities and entrance requirements for counselors.

Education Administrators

(D.O.T. 075.117-010, -018, -030; 090.117 except -034, 167; 091.107; 092.167; 094.117-010, 167-014; 096.167; 097.167; 099.117 except -022, 167-034; 100.117-010; 169.267-022; 239.137-010)

Significant Points

- Most jobs require experience in a related occupation, such as teacher or admissions counselor, and a master's or doctoral degree.
- Competition will be keen for jobs in higher education, but will be much less intense for jobs at the elementary and secondary school level.

Nature of the Work
Smooth operation of an educational institution requires competent administrators. Education administrators provide direction, leadership, and day-to-day management of educational activities in schools, colleges and universities, businesses, correctional institutions, museums, and job training and community service organizations. (College presidents and school superintendents are covered in the *Handbook* statement on general managers and top executives.) Education administrators set educational standards and goals and establish the policies and procedures to carry them out. They develop academic programs; monitor students' educational progress; train and motivate teachers and other staff; manage guidance and other student services; administer recordkeeping; prepare budgets; handle relations with parents, prospective and current students, employers, and the community; and perform many other duties.

Education administrators also supervise managers, support staff, teachers, counselors, librarians, coaches, and others. In an organization such as a small daycare center, one administrator may handle all these functions. In universities or large school systems, responsibilities are divided among many administrators, each with a specific function.

Those who manage elementary and secondary schools are called principals. They set the academic tone, hire teachers and other staff, help them improve their skills, and evaluate them. Principals confer with staff—advising, explaining, or answering procedural questions. They visit classrooms, observe teaching methods, review instructional objectives, and examine learning materials. They actively work with teachers to develop and maintain high curriculum standards, develop mission statements, and set performance goals and objectives. Principals must ensure they use clear, objective guidelines for teacher appraisals, since pay is often based on performance ratings.

Principals also meet and interact with other administrators, students, parents, and representatives of community organizations. Decision-making authority has shifted from school district central offices to individual schools. Thus, parents, teachers, and other members of the community play an important role in setting school policies and goals. Principals must pay attention to the concerns of these groups when making administrative decisions.

Budgets and reports on various subjects, including finances and attendance, are prepared by principals, who also oversee the requisitioning and allocation of supplies. As school budgets become tighter, many principals are more involved in public relations and fund raising to secure financial support for their schools from local businesses and the community.

Principals must take an active role to ensure that students meet national academic standards. Many principals develop school/business partnerships and school-to-work transition programs for students. Increasingly, principals must be sensitive to the needs of the rising number of non-English speaking and culturally diverse students. Growing enrollments, which are leading to overcrowding at many existing schools, are also a cause for concern. When addressing problems of inadequate available resources, administrators serve as advocates to build new schools or repair existing ones.

Schools continue to be involved with students' emotional welfare as well as their academic achievement. As a result, principals face responsibilities outside the academic realm. For example, in response to the growing number of dual-income and single-parent families and teenage parents, schools have established before- and after-school child-care programs or family resource centers, which also may offer parenting classes and social service referrals. With the help of community organizations, some principals have established programs to combat the increase in crime, drug and alcohol abuse, and sexually transmitted disease among students.

Assistant principals aid the principal in the overall administration of the school. Some assistant principals hold this position for several years to prepare for advancement to principal; others are career assistant principals. Depending on the number of students, the number of assistant principals a school employs may vary. They are responsible for programming student classes, ordering textbooks and supplies, and coordinating transportation, custodial, cafeteria, and other support services. They usually handle discipline, attendance, social and recreational programs, and health and safety. They also may counsel students on personal, educational, or vocational matters. With site-based management, assistant principals play a greater role in developing curriculum, evaluating teachers, and school-community relations, responsibilities previously assumed solely by the principal.

Administrators in school district central offices manage public schools under their jurisdiction. This group includes those who direct subject area programs such as English, music, vocational education, special education, and mathematics. They plan, evaluate, standardize, and improve curriculums and teaching techniques, and help teachers improve their skills and learn about new methods and materials. They oversee career counseling programs, and testing which measures students' abilities and helps place them in appropriate classes. Central office administrators also include directors of programs such as guidance, school psychology, athletics, curriculum and instruction, and professional development. With site-based manage-

ment, principals and assistant principals, along with teachers and other staff, have primary responsibility for many of these programs in their individual schools.

In colleges and universities, academic deans, deans of faculty, provosts, and university deans assist presidents and develop budgets and academic policies and programs. They direct and coordinate activities of deans of individual colleges and chairpersons of academic departments.

College or university department heads or chairpersons are in charge of departments such as English, biological science, or mathematics. In addition to teaching, they coordinate schedules of classes and teaching assignments; propose budgets; recruit, interview, and hire applicants for teaching positions; evaluate faculty members; encourage faculty development; and perform other administrative duties. In overseeing their departments, chairpersons must consider and balance the concerns of faculty, administrators, and students.

Higher education administrators also provide student services. Vice presidents of student affairs or student life, deans of students, and directors of student services may direct and coordinate admissions, foreign student services, health and counseling services, career services, financial aid, and housing and residential life, as well as social, recreational, and related programs. In small colleges, they may counsel students. Registrars are custodians of students' records. They register students, prepare student transcripts, evaluate academic records, assess and collect tuition and fees, plan and implement commencement, oversee the preparation of college catalogs and schedules of classes, and analyze enrollment and demographic statistics. Directors of admissions manage the process of recruiting, evaluating, and admitting students, and work closely with financial aid directors, who oversee scholarship, fellowship, and loan programs. Registrars and admissions officers must adapt to technological innovations in student information systems. For example, for those whose institutions present information—such as college catalogs and schedules—on the Internet, knowledge of on-line resources, imaging, and other computer skills is important. Directors of student activities plan and arrange social, cultural, and recreational activities, assist student-run organizations, and may orient new students. Athletic directors plan and direct intramural and intercollegiate athletic activities, including publicity for athletic events, preparation of budgets, and supervision of coaches.

Working Conditions

Education administrators hold management positions with significant responsibility. Coordinating and interacting with faculty, parents, and students can be fast-paced and stimulating, but also stressful and demanding. Some jobs include travel. Principals and assistant principals whose main duty often is discipline may find working with difficult students frustrating, but challenging. The number of school-age children is rising, and some school systems have hired assistant principals when a school's population increased significantly. In other school systems, principals may manage larger student bodies, which can also be stressful.

Most education administrators work more than 40 hours a week, including many nights and weekends when they oversee school activities. Many administrators work 10 or 11 months a year while others work year round.

Employment

Education administrators held about 386,000 jobs in 1996. About 9 out of 10 were in educational services—in elementary, secondary, and technical schools and colleges and universities. The rest worked in child daycare centers, religious organizations, job training centers, State departments of education, and businesses and other organizations that provide training for their employees.

Training, Other Qualifications, and Advancement

Most education administrators begin their careers in related occupations, and prepare for a job in education administration by completing a master's or doctoral degree. Because of the diversity of duties and levels of responsibility, their educational backgrounds and experience vary considerably. Principals, assistant principals, central office

Education administrators provide day-to-day management of elementary and secondary schools and colleges and universities.

administrators, and academic deans usually have held teaching positions before moving into administration. Some teachers move directly into principal positions; others first become assistant principals, or gain experience in other central office administrative jobs at either the school or district level in positions such as department head, curriculum specialist, or subject matter advisor. In some cases, administrators move up from related staff jobs such as recruiter, guidance counselor, librarian, residence hall director, or financial aid or admissions counselor.

To be considered for education administrator positions, workers must first prove themselves in their current jobs. In evaluating candidates, supervisors look for determination, confidence, innovativeness, motivation, leadership, and managerial attributes, such as ability to make sound decisions and organize and coordinate work efficiently. Since much of an administrator's job involves interacting with others, from students to parents to teachers, they must have strong interpersonal skills and be effective communicators and motivators. Knowledge of management principles and practices, gained through work experience and formal education, is important.

In most public schools, principals, assistant principals, and school administrators in central offices need a master's degree in education administration or educational supervision. Some principals and central office administrators have a doctorate or specialized degree in education administration. Most States require principals to be licensed as school administrators. Requirements for licensure vary by State. National standards for school leaders, including principals and supervisors, were recently developed by the Interstate School Leaders Licensure Consortium. States may use these national standards as guidelines for licensure requirements, or for activities such as mentoring, professional development, or accreditation of training programs. In private schools, which are not subject to State certification requirements, some principals and assistant principals hold only a bachelor's degree; however, the majority have a master's or doctoral degree.

Academic deans and chairpersons usually have a doctorate in their specialty. Most have held a professorship in their department before advancing. Admissions, student affairs, and financial aid directors and registrars sometimes start in related staff jobs with bachelor's degrees—any field usually is acceptable—and obtain advanced degrees in college student affairs or higher education administration. A Ph.D. or Ed.D. usually is necessary for top student affairs positions. Computer literacy and a background in mathematics or statistics may be assets in admissions, records, and financial work.

Advanced degrees in higher education administration, educational supervision, and college student affairs are offered in many colleges and universities. The National Council for Accreditation of Teacher Education accredits programs. Education administration degree programs include courses in school management, school law,

school finance and budgeting, curriculum development and evaluation, research design and data analysis, community relations, politics in education, counseling, and leadership. Educational supervision degree programs include courses in supervision of instruction and curriculum, human relations, curriculum development, research, and advanced pedagogy courses.

Education administrators advance by moving up an administrative ladder or transferring to larger schools or systems. They also may become superintendent of a school system or president of an educational institution.

Job Outlook

Substantial competition is expected for prestigious jobs as higher education administrators. Many faculty and other staff meet the education and experience requirements for these jobs, and seek promotion. However, the number of openings is relatively small; only the most highly qualified are selected. Candidates who have the most formal education and who are willing to relocate should have the best job prospects.

On the other hand, it is becoming more difficult to attract candidates for principal, vice principal, and administration jobs at the elementary and secondary school level—competition for these jobs is declining. Many teachers no longer have an incentive to move into these positions since the pay is not significantly higher and does not compensate for the added workload and responsibility of the position. Also, site-based management has given teachers more decision-making responsibility in recent years, possibly satisfying their desire to move into administration.

Employment of education administrators is expected to grow about as fast as the average for all occupations over the 1996-2006 period. However, most job openings will result from the need to replace administrators who retire or transfer to other occupations.

School enrollments at the elementary, secondary, and postsecondary level are all expected to grow over the projection period. Rather than opening new schools, many existing school populations will expand, spurring demand for assistant principals to help with the increased workload. Employment of education administrators will also grow as more services are provided to students and as efforts to improve the quality of education continue.

However, budget constraints are expected to moderate growth in this profession. At the postsecondary level, some institutions have been reducing administrative staffs to contain costs. Some colleges are consolidating administrative jobs and contracting with other providers for some administrative functions.

Earnings

Salaries of education administrators vary according to position, level of responsibility and experience, and the size and location of the institution. Generally, principals employed in public schools earn higher salaries than those in private schools.

According to a survey of public schools, conducted by the Educational Research Service, average salaries for principals and assistant principals in the 1996-97 school year were as follows:

Principals:

Elementary school	$62,900
Junior high/middle school	66,900
Senior high school	72,400

Assistant principals:

Elementary school	$52,300
Junior high/middle school	56,500
Senior high school	59,700
Directors, managers, coordinators, and supervisors of instructional services	70,800

In 1995-96, according to the College and University Personnel Association, median annual salaries for selected administrators in higher education were as follows:

Academic deans:

Medicine	$201,200
Law	141,400
Engineering	112,800
Arts and sciences	82,500
Business	81,700
Education	80,000
Social sciences	61,800
Mathematics	59,900

Student services directors:

Admissions and registrar	$50,700
Student financial aid	45,400
Student activities	34,500

Related Occupations

Education administrators apply organizational and leadership skills to provide services to individuals. Workers in related occupations include health services administrators, social service agency administrators, recreation and park managers, museum directors, library directors, and professional and membership organization executives. Since principals and assistant principals generally have extensive teaching experience, their backgrounds are similar to those of teachers and many school counselors.

Sources of Additional Information

For information on elementary and secondary school principals, assistant principals, and central office administrators, contact:

- American Federation of School Administrators, 1729 21st St. NW., Washington, DC 20009.
- American Association of School Administrators, 1801 North Moore St., Arlington, VA 22209.

For information on elementary school principals and assistant principals, contact:

- The National Association of Elementary School Principals, 1615 Duke St., Alexandria, VA 22314-3483.

For information on secondary school principals and assistant principals, contact:

- The National Association of Secondary School Principals, 1904 Association Dr., Reston, VA 20191.

For information on college student affairs administrators, contact:

- National Association of Student Personnel Administrators, 1875 Connecticut Ave. NW., Suite 418, Washington, DC 20009-5728.

For information on collegiate registrars and admissions officers, contact:

- American Association of Collegiate Registrars and Admissions Officers, One Dupont Circle NW., Suite 330, Washington, DC 20036-1171.

Librarians

(D.O.T. 100 except 367-018; 109.267-014)

Significant Points

- A master's degree in library science is usually required; special librarians may need an additional graduate or professional degree.
- Slow employment growth, coupled with an increasing number of master of library science graduates, will result in more applicants competing for fewer jobs.
- Applicants for librarian jobs in large cities or suburban areas will face competition, while those willing to work in rural areas should have better job prospects.

Nature of the Work

The traditional concept of a library is being redefined, from a place to access paper records or books, to one which also houses the most

advanced mediums, including CD-ROM, the Internet, virtual libraries, and remote access to a wide range of resources. Consequently, librarians are increasingly combining traditional duties with tasks involving quickly changing technology. Librarians assist people in finding information and using it effectively in their personal and professional lives. They must have knowledge of a wide variety of scholarly and public information sources, and follow trends related to publishing, computers, and the media to effectively oversee the selection and organization of library materials. Librarians manage staff and develop and direct information programs and systems for the public, to ensure information is organized to meet users' needs.

There are generally three aspects of library work—user services, technical services, and administrative services; most librarian positions incorporate all three aspects. Even librarians specializing in one of these areas may perform other responsibilities. Librarians in user services, such as reference and children's librarians, work with the public to help them find the information they need. This may involve analyzing users' needs to determine what information is appropriate, and searching for, acquiring, and providing information. It also includes an instructional role, such as showing users how to access information. For example, librarians commonly help users navigate the Internet, showing them how to most efficiently search for relevant information. Librarians in technical services, such as acquisitions and cataloguing, acquire and prepare materials for use and may not deal directly with the public. Librarians in administrative services oversee the management and planning of libraries, negotiate contracts for services, materials, and equipment, supervise library employees, perform public relations and fundraising duties, prepare budgets, and direct activities to ensure that everything functions properly.

In small libraries or information centers, librarians generally handle all aspects of the work. They read book reviews, publishers' announcements, and catalogues to keep up with current literature and other available resources, and select and purchase materials from publishers, wholesalers, and distributors. Librarians prepare new materials for use by classifying them by subject matter, and describe books and other library materials in a way users can easily find them. They supervise assistants who prepare cards, computer records, or other access tools that direct users to resources. In large libraries, librarians may specialize in a single area, such as acquisitions, cataloguing, bibliography, reference, special collections, or administration. Teamwork is increasingly important to ensure quality service to the public.

Librarians also compile lists of books, periodicals, articles, and audiovisual materials on particular subjects, analyze collections, and recommend materials to be acquired. They may collect and organize books, pamphlets, manuscripts, and other materials in a specific field, such as rare books, genealogy, or music. In addition, they coordinate programs such as storytelling for children, and literacy skills and book talks for adults; conduct classes on Internet use and other topics; publicize services; provide reference help; supervise staff; prepare budgets; write grants; and oversee other administrative matters.

Librarians may be classified according to the type of library in which they work—public libraries, school library media centers, academic libraries, and special libraries. They may work with specific groups, such as children, young adults, adults, or the disadvantaged. In school library media centers, librarians help teachers develop curricula, acquire materials for classroom instruction, and sometimes team teach.

Librarians may also work in information centers or libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional associations, medical centers, hospitals, religious organizations, and research laboratories. They build and arrange the organization's information resources, usually limited to subjects of special interest to the organization. These special librarians can provide vital information services by preparing abstracts and indexes of current periodicals, organizing bibliographies, or analyzing background information and preparing reports on areas of particular interest. For instance, a special librarian working for a corporation may provide the sales department with information on competitors or new developments affecting their field.

Many libraries have access to remote databases, as well as maintaining their own computerized databases. The widespread use of automation in libraries makes database searching skills important to librarians. Librarians develop and index databases and act as trainers to help users develop searching skills to obtain the information they need. Some libraries are forming consortiums with other libraries through electronic mail (e-mail). This allows patrons to submit information requests to several libraries at once. Use of the Internet and other world-wide computer systems is also expanding the amount of available reference information. Librarians must be aware of how to use these resources to locate information.

Librarians with appropriate computer and information systems skills may work as automated systems librarians, planning and operating computer systems, and information science librarians, designing information storage and retrieval systems and developing procedures for collecting, organizing, interpreting, and classifying information. These librarians may analyze and plan for future information needs. (See statement on computer scientists and systems analysts elsewhere in the *Handbook*.) The increased use of automated information systems enables librarians to focus on administrative and budgeting responsibilities, grant writing, and specialized research requests, while delegating more technical and user services responsibilities to technicians. (See statement on library technicians elsewhere in the *Handbook*.)

Increasingly, librarians apply their information management and research skills to arenas outside of libraries—for example, database development, reference tool development, information systems, publishing, Internet coordination, marketing, and training of database users. Entrepreneurial librarians may start their own consulting practices, acting as free-lance librarians or information brokers and providing services to other libraries, businesses, or government agencies.

Working Conditions

Assisting users in obtaining information for their jobs, recreational purposes, and other needs can be challenging and satisfying; working with users under deadlines may be demanding and stressful. Selecting and ordering new materials can be stimulating and rewarding. However, librarians also spend a significant portion of time at their desks or in front of computer terminals; extended work at video display terminals may cause eyestrain and headaches.

Librarians often help users search for relevant information on the Internet.

More than 3 out of 10 librarians work part time. Public and college librarians often work weekends and evenings, and may have to work some holidays. School librarians generally have the same workday schedule as classroom teachers and similar vacation schedules. Special librarians may work normal business hours, but in fast-paced industries, such as advertising or legal services, may work longer hours during peak times.

Employment

Librarians held about 154,000 jobs in 1996. Most were in school and academic libraries; others were in public and special libraries. A small number of librarians worked for hospitals and religious organizations. Others worked for governments at all levels.

Training, Other Qualifications, and Advancement

A master's degree in library science (MLS) is necessary for librarian positions in most public, academic, and special libraries, and in some school libraries. In the Federal Government, an MLS or the equivalent in education and experience is required. Many colleges and universities offer MLS programs, but employers often prefer graduates of the approximately 50 schools accredited by the American Library Association. Most MLS programs require a bachelor's degree; any liberal arts major is appropriate.

Most MLS programs take 1 year to complete; others take 2. A typical graduate program includes courses in the foundations of library and information science, including the history of books and printing, intellectual freedom and censorship, and the role of libraries and information in society. Other basic courses cover material selection and processing; the organization of information; reference tools and strategies; and user services. Courses are adapted to educate librarians to use new resources brought about by advancing technology such as on-line reference systems, Internet search methods, and automated circulation systems. Course options can include resources for children or young adults; classification, cataloguing, indexing, and abstracting; library administration; and library automation.

An MLS provides general preparation for library work, but some individuals specialize in a particular area such as reference, technical services, or children's services. A Ph.D. degree in library and information science is advantageous for a college teaching position, or a top administrative job in a college or university library or large library system.

In special libraries, an MLS is also usually required. In addition, most special librarians supplement their education with knowledge of the subject specialization, sometimes earning a master's, doctoral, or professional degree in the subject. Subject specialization include medicine, law, business, engineering, and the natural and social sciences. For example, a librarian working for a law firm may also be a licensed attorney, holding both library science and law degrees. In some jobs, knowledge of a foreign language is needed.

State certification requirements for public school librarians vary widely. Most States require that school librarians, often called library media specialists, be certified as teachers and have courses in library science. In some cases, an MLS, perhaps with a library media specialization, or a master's in education with a specialty in school library media or educational media, is needed. Some States require certification of public librarians employed in municipal, county, or regional library systems.

Librarians participate in continuing training once they are on the job, to keep abreast of new information systems brought about by changing technology.

Experienced librarians may advance to administrative positions, such as department head, library director, or chief information officer.

Job Outlook

Slow employment growth, coupled with an increasing number of MLS graduates will result in more applicants competing for fewer jobs. Applicants for librarian jobs in large cities or suburban areas, where most graduates prefer to work, will face competition; those willing to work in rural areas should have better job prospects.

Some job openings for librarians will stem from projected slower-than-average employment growth through the year 2006, reflecting budgetary constraints in school, public, and college and university libraries. Additional job openings will arise from replacement needs over the next decade, as many librarians reach retirement age. In an effort to reduce costs, however, libraries are reluctant to add new positions and may even reduce staff.

The increasing use of computerized information storage and retrieval systems may contribute to reduced demand for librarians. Computerized systems make cataloguing easier, and this task can now be handled by library technicians. In addition, many libraries are equipped for users to access library computers directly from their homes or offices. These systems allow users to bypass librarians and conduct research on their own. However, librarians are needed to manage staff, help users develop database searching techniques, address complicated reference requests, and define users' needs.

Opportunities will be best for librarians outside traditional settings. Nontraditional library settings include information brokers, private corporations, and consulting firms. Many companies are turning to librarians because of their research and organizational skills, and knowledge of computer databases and library automation systems. Librarians can review the vast amount of information that is available and analyze, evaluate, and organize it according to a company's specific needs. Librarians are also hired by organizations to set up information on the Internet. Librarians working in these settings may be classified as systems analysts, database specialists and trainers, webmasters or web developers, or LAN (local area network) coordinators.

Earnings

Salaries of librarians vary by the individual's qualifications and the type, size, and location of the library.

According to a survey by the American Library Association, the average salary of children's librarians in academic and public libraries was $34,600 in 1996; reference/information librarians averaged $35,800; and cataloguers and classifiers earned $36,600. Beginning librarians with a master's degree but no professional experience averaged $28,700 in 1996.

According to the Special Libraries Association, salaries for special librarians with 2 years or less of library experience averaged $33,100 in 1996, while those with 3 to 5 years of experience averaged $37,400. Salaries for special librarians with primarily administrative responsibilities averaged $58,400.

Salaries for medical librarians with 1 year or less experience averaged $25,900 in 1995, according to the Medical Library Association. The average salary for all medical librarians was $40,800.

The average annual salary for all librarians in the Federal Government in nonsupervisory, supervisory, and managerial positions was $50,400 in 1997.

Related Occupations

Librarians play an important role in the transfer of knowledge and ideas by providing people with access to the information they need and want. Jobs requiring similar analytical, organizational, and communicative skills include archivists, information scientists, museum curators, publishers' representatives, research analysts, information brokers, and records managers. The management aspect of a librarian's work is similar to the work of managers in a variety of business and government settings. School librarians have many duties similar to those of school teachers. Other jobs requiring the computer skills of some librarians include webmasters or web developers, database specialists, and systems analysts.

Sources of Additional Information

Information on librarianship, including information on scholarships or loans, is available from the American Library Association. For a listing of accredited library education programs, check their homepage:

- American Library Association, Office for Library Personnel Resources, 50 East Huron St., Chicago, IL 60611. Homepage: http://www.ala.org/

For information on a career as a special librarian, write to:

- Special Libraries Association, 1700 18th St. NW., Washington, DC 20009.

Material about a career in information science is available from:

☛ American Society for Information Science, 8720 Georgia Ave., Suite 501, Silver Spring, MD 20910.

Information on graduate schools of library and information science can be obtained from:

☛ Association for Library and Information Science Education, P.O. Box 7640, Arlington, VA 22207. Homepage: http://www.sils.umich.edu/ALISE/

For information on a career as a law librarian, scholarship information, and a list of ALA-accredited schools offering programs in law librarianship, contact:

☛ American Association of Law Libraries, 53 West Jackson Blvd., Suite 940, Chicago, IL 60604.

For information on employment opportunities as a health sciences librarian, scholarship information, credentialing information, and a list of MLA-accredited schools offering programs in health sciences librarianship, contact:

☛ Medical Library Association, 6 N. Michigan Ave., Suite 300, Chicago, IL 60602.

Information on acquiring a job as a librarian with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000 (TDD 912 744-2299). That number is not toll-free and charges may result. Information also is available from their Internet site: http://www.usajobs.opm.gov.

Information concerning requirements and application procedures for positions in the Library of Congress may be obtained directly from:

☛ Personnel Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540.

State library agencies can furnish information on scholarships available through their offices, requirements for certification, and general information about career prospects in the State. Several of these agencies maintain job hotlines reporting openings for librarians.

State departments of education can furnish information on certification requirements and job opportunities for school librarians.

Many library science schools offer career placement services to their alumni and current students. Some allow non-affiliated students and jobseekers to use their services.

Library Technicians

(D.O.T. 100.367-018)

Significant Points

- Training ranges from on-the-job training to a bachelor's degree.
- Employment is expected to grow faster than average as libraries use technicians to perform some librarian duties in an effort to stretch shrinking budgets.

Nature of the Work

Library technicians, commonly called "paraprofessionals," help librarians acquire, prepare, and organize material, and assist users in finding materials and information. Technicians in small libraries handle a wide range of duties; those in large libraries usually specialize. As libraries increasingly use new technologies—such as CD-ROM, the Internet, virtual libraries, and automated databases—the duties of library technicians are expanding and evolving accordingly. Library technicians are assuming greater responsibilities, in some cases taking on tasks previously performed by librarians. (See the statement on librarians elsewhere in the *Handbook*.)

Depending on the employer, library technicians may have other titles, such as library technical assistants. Library technicians direct library users to standard references, organize and maintain periodicals, prepare volumes for binding, handle interlibrary loan requests, prepare invoices, perform routine cataloguing and coding of library materials, retrieve information from computer databases, and supervise other support staff.

Library technicians help librarians acquire, prepare, and organize material.

The widespread use of computerized information storage and retrieval systems has resulted in technicians handling more technical and user services, such as entering catalogue information into the library's computer, that were once performed by librarians. Technicians may assist with customizing databases. In addition, technicians may instruct patrons how to use computer systems to access data. The increased use of automation has cut down on the amount of clerical work performed by library technicians. Many libraries now offer self-service registration and circulation with computers, decreasing the time library technicians spend manually recording and inputting records.

Some library technicians operate and maintain audiovisual equipment, such as projectors, tape recorders, and videocassette recorders, and assist library users with microfilm or microfiche readers. They may also design posters, bulletin boards, or displays.

Those in school libraries encourage and teach students to use the library and media center. They also help teachers obtain instructional materials and assist students with special assignments. Some work in special libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional societies, medical centers, and research laboratories, where they conduct literature searches, compile bibliographies, and prepare abstracts, usually on subjects of particular interest to the organization.

Working Conditions

Technicians who work with library users answer questions and provide assistance. Those who prepare library materials sit at desks or computer terminals for long periods and may develop headaches or eyestrain from working with video display terminals. Some duties, like calculating circulation statistics, can be repetitive and boring. Others, such as performing computer searches using local and regional library networks and cooperatives, can be interesting and challenging.

Library technicians in school libraries work regular school hours. Those in public libraries and college and university (academic) libraries may work weekends, evenings and some holidays. Library technicians in special libraries usually work normal business hours, although they are often called upon to work overtime.

Library technicians usually work under the supervision of a professional librarian, although they may work independently in certain situations.

Employment

Library technicians held about 78,000 jobs in 1996. Most worked in school, academic, or public libraries. Some worked in hospitals and religious organizations. The Federal Government, primarily the Department of Defense and the Library of Congress, and State and local governments also employed library technicians.

Training, Other Qualifications, and Advancement

Training requirements for library technicians vary widely, ranging from a high school diploma to specialized postsecondary training. Some employers hire individuals with work experience or other training; others train inexperienced workers on the job. Other employers require that technicians have an associate's or bachelor's degree. Given the rapid spread of automation in libraries, computer skills are needed for many jobs. Knowledge of databases, library automation systems, on-line library systems, on-line public access systems, and circulation systems is valuable.

Some 2-year colleges offer an associate of arts degree in library technology. Programs include both liberal arts and library-related study. Students learn about library and media organization and operation, and how to order, process, catalogue, locate, and circulate library materials and work with library automation. Libraries and associations offer continuing education courses to keep technicians abreast of new developments in the field.

Library technicians usually advance by assuming added responsibilities. For example, technicians may start at the circulation desk, checking books in and out. After gaining experience, they may be responsible for storing and verifying information. As they advance, they may become involved in budget and personnel matters in their department. Some library technicians advance to supervisory positions and are in charge of the day-to-day operation of their department.

Job Outlook

Employment of library technicians is expected to grow faster than the average for all occupations through the year 2006. Many additional job openings will result from the need to replace library technicians who transfer to other fields or leave the labor force. Similar to other fields, willingness to relocate enhances an aspiring library technician's job prospects.

The increasing use of library automation may spur job growth among library technicians. Computerized information systems have simplified certain tasks, such as descriptive cataloguing, which can now be handled by technicians instead of librarians. For instance, technicians can now easily retrieve information from a central database and store it in the library's own computer. Although budgetary constraints may dampen employment growth of library technicians in school, public, and college and university libraries, libraries may use technicians to perform some librarian duties in an effort to stretch shrinking budgets. Growth in the number of professionals and other workers who use special libraries should result in relatively fast employment growth among library technicians in those settings.

Earnings

Salaries for library technicians vary widely, depending on the type of library and geographic location. According to a salary survey by *Library Mosaics Magazine*, library technicians employed in 2-year colleges averaged $27,200 in 1996, in 4-year colleges or universities, $30,200, in special libraries, $24,100, and in public libraries, $33,000. Salaries of library technicians in the Federal Government averaged $26,500 in 1997.

Related Occupations

Library technicians perform organizational and administrative duties. Workers in other occupations with similar duties include library clerks, information clerks, record clerks, medical record technicians, and title searchers. Library technicians also assist librarians. Other workers who assist professionals include museum technicians, teacher aides, legal assistants, and engineering and science technicians.

Sources of Additional Information

Information about a career as a library technician can be obtained from:

- Council on Library/Media Technology, P.O. Box 951, Oxon Hill, MD 20750.

For information on training programs for library/media technical assistants, write to:

- American Library Association, Office for Library Personnel Resources, 50 East Huron St., Chicago, IL 60611.

Information on acquiring a job as a library technician with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000 (TDD 912 744-2299). That number is not toll-free and charges may result. Information also is available from their Internet site: http://www.usajobs.opm.gov

Information concerning requirements and application procedures for positions in the Library of Congress may be obtained directly from:

- Personnel Office, Library of Congress, Washington, DC 20540.

State library agencies can furnish information on requirements for technicians, and general information about career prospects in the State. Several of these agencies maintain job hotlines reporting openings for library technicians.

State departments of education can furnish information on requirements and job opportunities for school library technicians.

Preschool Teachers and Child-Care Workers

(D.O.T. 092.227-018, 355.674-010, 359.677-010, -018, -026)

Significant Points

- About 40 percent of preschool teachers and child-care workers—4 times the proportion for all workers—are self-employed; most are family daycare providers.
- Turnover is high due to stressful conditions and low pay and benefits.
- While training requirements vary from a high school diploma to a college degree, a high school diploma and little or no experience is usually adequate.

Nature of the Work

Preschool teachers and child-care workers nurture and teach preschool children—age 5 or younger—in child care centers, nursery schools, preschools, public schools, and family child care homes. These workers play an important role in a child's development by caring for the child when the parents are at work or away for other reasons. Some parents enroll their children in nursery schools or child-care centers primarily to provide them with the opportunity to interact with other children. In addition to attending to children's basic needs, these workers organize activities that stimulate the children's physical, emotional, intellectual, and social growth. They help children explore their interests, develop their talents and independence, build self-esteem, and learn how to behave with others.

Preschool teachers and child-care workers spend most of their day working with children. However, they do maintain contact with parents or guardians, through daily informal meetings or scheduled conferences, to discuss each child's progress and needs. Many preschool teachers and child-care workers keep records of each child's progress and suggest ways parents can increase their child's learning and development at home. Some preschools and child care centers actively recruit parent volunteers to work with the children and participate in administrative decisions and program planning.

Most preschool teachers and child-care workers perform a combination of basic care and teaching duties. Through many basic care activities, preschool teachers and child-care workers provide opportunities for children to learn. For example, a worker who shows a child how to tie a shoe teaches the child and also provides for that child's basic care needs. Through their experiences in preschool and child-care programs, children learn about trust and gain a sense of security.

Children at this age learn mainly through play. Recognizing the importance of play, preschool teachers and child-care workers build their program around it. They capitalize on children's play to further

Preschool teachers and child-care workers attend to children's basic needs and organize activities that stimulate development.

language development (storytelling and acting games), improve social skills (working together to build a neighborhood in a sandbox), and introduce scientific and mathematical concepts (balancing and counting blocks when building a bridge or mixing colors when painting). (A statement on teacher aides—who assist classroom teachers—appears elsewhere in the *Handbook*.)

Thus, a less structured approach is used to teach preschool children, including small group lessons, one-on-one instruction, and learning through creative activities, such as art, dance, and music. Interaction with peers is an important part of a child's early development. Preschool children are given an opportunity to engage in conversation and discussions, and learn to play and work cooperatively with their classmates. Preschool teachers and child-care workers play a vital role in preparing children to build the skills they will need in elementary school.

Preschool teachers and child-care workers greet children as they arrive, help them remove outer garments, and select an activity of interest. When caring for infants, they feed and change them. To ensure a well-balanced program, preschool teachers and child-care workers prepare daily and long-term schedules of activities. Each day's activities balance individual and group play and quiet and active time. Children are given some freedom to participate in activities in which they are interested.

Helping to keep children healthy is an important part of the job. Preschool teachers and child-care workers serve nutritious meals and snacks and teach good eating habits and personal hygiene. They see to it that children have proper rest periods. They spot children who may not feel well or show signs of emotional or developmental problems and discuss these matters with their supervisor and the child's parents. In some cases, preschool teachers and child-care workers help parents identify programs that will provide basic health services.

Early identification of children with special needs, such as those with behavioral, emotional, physical, or learning disabilities, is important to improve their future learning ability. Special education teachers often work with these preschool children to provide the individual attention they need. (Special education teachers are covered in a separate statement in the *Handbook*.)

Working Conditions

Preschool facilities include private homes, schools, religious institutions, workplaces where employers provide care for employees' children, or private buildings. Individuals who provide care in their own homes are generally called family child care providers. (Child-care workers who work in the child's home are covered in the statement on private household workers found elsewhere in the *Handbook*.)

Watching children grow, enjoy learning, and gain new skills can be very rewarding. While working with children, preschool teachers and child-care workers often improve the child's communication, learning, and other personal skills. Also, the work is never routine; each day is marked by new activities and challenges. However, child care can be physically and emotionally taxing, as workers constantly stand, walk, bend, stoop, and lift to attend to each child's interests and problems.

To ensure that children receive proper supervision, State regulations require certain ratios of workers to children. The ratio varies with the age of the children. Child development experts generally recommend that a single caregiver be responsible for no more than 3 or 4 infants (less than 1 year old), 5 or 6 toddlers (1 to 2 years old), or 10 preschool-age children (between 2 and 5 years old).

The working hours of preschool teachers and child-care workers vary widely. Child care centers are generally open year round with long hours so that parents can drop off and pick up their children before and after work. Some centers employ full-time and part-time staff with staggered shifts to cover the entire day. Some workers are unable to take regular breaks during the day due to limited staffing. Public and many private preschool programs operate during the typical 9- or 10-month school year, employing both full-time and part-time workers. Many preschool teachers may work extra unpaid hours each week on curriculum planning, parent meetings, and occasional fundraising activities. Family daycare providers have flexible hours and daily routines, but may work long or unusual hours to fit parents' work schedules.

Turnover in this occupation is high. Many preschool teachers and child-care workers suffer burnout due to long hours, low pay and benefits, and stressful conditions.

Employment

Preschool teachers and child-care workers held about 1.2 million jobs in 1996. Many worked part time. About 4 out of 10 preschool teachers and child-care workers are self-employed, most of whom are family daycare providers.

Over 50 percent of all salaried preschool teachers and child-care workers are found in child care centers and preschools, and more than 15 percent work for a religious institution. The rest work in other community organizations and in government. Some child care programs are for-profit centers; some are affiliated with a local or national chain. Religious institutions, community agencies, school systems, and State and local governments operate nonprofit programs. A growing number of business firms operate on-site child care centers for the children of their employees.

Training, Other Qualifications, and Advancement

The training and qualifications required of preschool teachers and child-care workers vary widely. Each State has its own licensing requirements that regulate caregiver training, ranging from a high school diploma, to community college courses, to a college degree in child development or early childhood education. Some States require continuing education for workers in this field. However, most State requirements are minimal. Formal education requirements in some private preschools and child care centers are often lower than in public programs since they are not bound by State requirements. Often, child-care workers can obtain employment with a high school diploma and little or no experience.

Some States prefer preschool teachers and child-care workers to have a Child Development Associate (CDA) credential, which is offered by the Council for Early Childhood Professional Recognition. The CDA credential is recognized as a qualification for teachers and directors in 46 States and the District of Columbia. To be eligible, applicants must have 120 hours of training, a high school diploma, and 480 hours of experience. If applicants lack the required experience, they may participate in a 1-year child development training program. Those who meet eligibility requirements must also demonstrate their knowledge and skills to a team of child-care professionals from the Council for Early Childhood Professional Recognition. Applicants whose skills meet certain nationally recognized standards receive the CDA credential.

Some employers may not require a CDA credential, but may require secondary or postsecondary courses in child development and early childhood education, and possibly work experience in a child-care setting. Other schools require their own specialized training. For example, Montessori preschool teachers must complete an additional

year of training after receiving their bachelor's degree in early childhood education or a related field. Public schools typically require a bachelor's degree and State teacher certification. Teacher training programs include a variety of liberal arts courses, courses in child development, student teaching, and prescribed professional courses, including instruction in teaching gifted, disadvantaged, and other children with special needs.

Preschool teachers and child-care workers must be enthusiastic and constantly alert, anticipate and prevent problems, deal with disruptive children, and provide fair but firm discipline. They must communicate effectively with the children and their parents, as well as other teachers and child-care workers. Workers should be mature, patient, understanding, and articulate, and have energy and physical stamina. Skills in music, art, drama, and storytelling are also important. Those who work for themselves must have business sense and management abilities.

Opportunities for advancement are limited in this occupation. However, as preschool teachers and child-care workers gain experience, some may advance to supervisory or administrative positions in large child-care centers or preschools. Often these positions require additional training, such as a bachelor's or master's degree. Other workers move on to work in resource and referral agencies, consulting with parents on available child services. Some workers become involved in policy or advocacy work related to child care and early childhood education. With a bachelor's degree, preschool teachers may become certified to teach in public schools at the kindergarten, elementary, and secondary school levels. Some workers set up their own child-care businesses.

Job Outlook

Employment of preschool teachers and child-care workers is projected to increase faster than the average for all occupations through the year 2006. In addition, many preschool teachers and child-care workers leave the occupation each year for other—often better paying—jobs, family responsibilities, or other reasons. High turnover, combined with rapid job growth, is expected to create many openings for preschool teachers and child-care workers. Qualified persons who are interested in this work should have little trouble finding and keeping a job.

Although the number of children under 5 years of age is expected to decline slightly through the year 2006, the proportion of youngsters in child care and preschool should increase, keeping demand high for preschool teachers and child-care workers. Women between the ages of 20 and 44 have been joining the labor force in growing numbers. Moreover, women are returning to work sooner after childbirth. As more mothers of preschool and school-age children enter the work force, the need for child care will grow. Many parents will continue to turn to formal child-care arrangements because they find it too difficult to set up a satisfactory arrangement with a relative, babysitter, or live-in worker, or because they prefer a more structured learning and social environment. Additionally, many employers are increasing child-care benefits to their employees in the form of direct child-care assistance—such as vouchers and subsidies for community child care centers—more flexible work schedules, and on-site child care facilities, thus making child care more affordable and convenient for many parents.

Recently enacted welfare reform legislation requiring more mothers of young children to work may also spur demand for child-care workers as parents seek suitable child care for children previously cared for at home. These women may turn to lower-cost child care, such as family child care homes, rather than child care centers or nursery schools.

Earnings

Pay depends on the employer and educational attainment of the worker. Although the pay is generally very low, more education means higher earnings in some cases.

In 1996, median weekly earnings of full-time, salaried child-care workers were $250. The middle 50 percent of child-care workers earned between $190 and $310. The top 10 percent earned at least $390; the bottom 10 percent earned less than $140.

Preschool teachers in public schools who have State teacher certification generally have salaries and benefits comparable to kindergarten and elementary school teachers. According to the National Education Association, public elementary school teachers earned an estimated average salary of $37,300 in the 1995-96 school year. (A statement on kindergarten, elementary, and secondary school teachers is found elsewhere in the *Handbook*.) Preschool teachers in privately funded child care centers generally earn much lower salaries than other comparably educated workers.

Earnings of self-employed child-care workers vary depending on the hours worked, number and ages of the children, and the location.

Benefits vary, but are minimal for most preschool and child-care workers. Many employers offer free or discounted child care to employees. Some offer a full benefits package, including health insurance and paid vacations, but others offer no benefits at all. Some employers offer seminars and workshops to help workers improve upon or learn new skills. A few are willing to cover the cost of courses taken at community colleges or technical schools. Nonprofit and religiously-affiliated centers often pay higher wages and offer more generous benefits than independent for-profit centers.

Related Occupations

Child-care work requires patience; creativity; an ability to nurture, motivate, teach, and influence children; and leadership, organizational, and administrative abilities. Others who work with children and need these aptitudes include teacher aides, children's tutors, kindergarten and elementary school teachers, early childhood program directors, and child psychologists.

Sources of Additional Information

For information on careers in educating children and issues affecting preschool teachers and child-care workers, contact:

- National Association for the Education of Young Children, 1509 16th St. NW., Washington, DC 20036.
- Association for Childhood Education International, 11501 Georgia Ave., Suite 315, Wheaton, MD 20902-1924.

For eligibility requirements and a description of the Child Development Associate credential, write to:

- Council for Early Childhood Professional Recognition, 2460 16th St. NW., Washington, DC 20009.

For information on salaries and efforts to improve compensation in child care, contact:

- National Center for the Early Childhood Work Force, 733 15th St. NW., Suite 1037, Washington, DC 20005.

State Departments of Human Services or Social Services can supply State regulations and training requirements for child-care workers.

Recreation Workers

(D.O.T. 153.137-010; 159.124-010; 187.167-238; 195.227-010, -014; 352.167-010)

Significant Points

- The recreation field has an unusually large number of part-time, seasonal, and volunteer jobs.
- Educational requirements range from a high school diploma, or sometimes less for many summer jobs, to a graduate degree in parks and recreation or leisure studies for some administrative positions.
- Competition will remain keen for full-time career positions; persons with experience gained in part-time or seasonal recreation jobs, together with formal recreation training, should have the best opportunities.

Nature of the Work

Many people spend much of their leisure time participating in a wide variety of organized recreation activities, such as aerobics, arts and crafts, water sports, tennis, camping and softball. Recreation programs, as diverse as the people they serve, are offered at local playgrounds and

recreation areas, parks, community centers, health clubs, religious organizations, camps, theme parks, and most tourist attractions. Recreation workers plan, organize, and direct these activities.

Recreation workers organize and lead programs and watch over recreational facilities and equipment. They help people pursue their interest in crafts, art, or sports by leading activities. These activities enable people to share common interests in physical and mental activities for entertainment, physical fitness, and self-improvement. Recreation workers organize teams and leagues, and also teach the correct use of equipment and facilities.

In the workplace, recreation workers organize and direct leisure activities and athletic programs for all ages, such as bowling and softball leagues, social functions, travel programs, discount services, and, to an increasing extent, exercise and fitness programs. These activities are generally for adults.

Recreation workers hold a variety of positions at many different levels of responsibility. *Recreation leaders* are responsible for a recreation program's daily operation, and organize and direct participants. They may lead and give instruction in dance, drama, crafts, games, and sports; schedule use of facilities and keep records of equipment use; and ensure recreation facilities and equipment are used properly. Workers who provide instruction in specialties such as art, music, drama, swimming, or tennis may be called *activity specialists*. They conduct classes and coach teams in the activity in which they specialize.

Recreation supervisors plan, organize, and manage recreation activities to meet the needs of the population they serve, and supervise recreation leaders. A recreation supervisor serves as a liaison between the director of the park or recreation center and the recreation leaders. A recreation supervisor who has more specialized responsibilities may also direct special activities or events, and oversee a major activity, such as aquatics, gymnastics, or performing arts.

Directors of recreation and parks develop and manage comprehensive recreation programs in parks, playgrounds, and other settings. Directors usually serve as a technical advisor to State and local recreation and park commissions, and may be responsible for recreation and park budgets.

Camp counselors lead and instruct children and teenagers in outdoor-oriented forms of recreation, such as swimming, hiking, horseback riding, and camping. Activities are often intended to enhance campers' appreciation of nature and responsible use of the environment. In addition, counselors provide campers with specialized instruction in activities such as archery, boating, music, drama, gymnastics, tennis, and computers. In resident camps, counselors also provide guidance and supervise daily living and general socialization.

In a related occupation, *recreational therapists* help individuals recover or adjust to illness, disability, or specific social problems; this occupation is described elsewhere in the *Handbook*.

Working Conditions

Recreation workers must work while others engage in leisure time activities. While most recreation workers put in about 40 hours a week, people entering this field, especially camp counselors, should expect some night and weekend work and irregular hours. About 3 out of 10 work part time, and many jobs are seasonal. The work setting for recreation workers may be anywhere from a cruise ship, to a woodland recreational park, to a playground in the center of a large urban community. Recreation workers often spend much of their time outdoors and may work under a variety of weather conditions. Recreation directors and supervisors may spend most of their time in an office planning programs and special events. Because full-time recreation workers spend more time acting as managers than hands-on activities leaders, they engage in less physical activity. However, as is the case for anyone engaged in physical activity, recreation workers risk suffering an injury, and the work can be physically challenging.

Employment

Recreation workers held about 233,000 jobs in 1996, and many additional workers held summer jobs in this occupation. Of those who held year-round jobs as recreation workers, about half worked in park and recreation departments of municipal and county governments. Nearly 2 out of 10 worked in membership organizations with a civic, social, fraternal, or religious orientation—the Boy Scouts, the YWCA, and Red Cross, for example. About 1 out of 10 were in programs run by social service organizations—senior centers and adult daycare programs, or residential care facilities such as halfway houses, group homes, and institutions for delinquent youth. Another 1 out 10 worked for nursing and other personal care facilities.

Recreation workers interact with young people.

Other employers included commercial recreation stablishments, amusement parks, sports and entertainment centers, wilderness and survival enterprises, tourist attractions, vacation excursion companies, hotels and resorts, summer camps, health and athletic clubs, and apartment complexes.

The recreation field has an unusually large number of part-time, seasonal, and volunteer jobs. These jobs include summer camp counselors, lifeguards, craft specialists, and after-school and weekend recreation program leaders. Teachers and college students take many jobs as recreation workers when school is not in session.

Many unpaid volunteers assist paid recreation workers. The vast majority of volunteers serve as activity leaders at local day-camp programs, or in youth organizations, camps, nursing homes, hospitals, senior centers, YMCA's, and other settings. Some volunteers serve on local park and recreation boards and commissions. Volunteer experience, part-time work during school, or a summer job can lead to a full-time career as a recreation worker.

Training, Other Qualifications, and Advancement

Education needed for recreation worker jobs ranges from a high school diploma, or sometimes less for many summer jobs, to graduate education for some administrative positions in large public recreation systems. Full-time career professional positions usually require a college degree with a major in parks and recreation or leisure studies, but a bachelor's degree in any liberal arts field may be sufficient for some jobs in the private sector. In industrial recreation, or "employee services" as it is more commonly called, companies prefer to hire those with a bachelor's degree in recreation or leisure studies and a background in business administration.

Specialized training or experience in a particular field, such as art, music, drama, or athletics, is an asset for many jobs. Some jobs also require a certification. For example, when teaching or coaching water-related activities, a lifesaving certificate is a prerequisite.

Graduates of associate degree programs in parks and recreation, social work, and other human services disciplines also enter some career recreation positions. Occasionally high school graduates are able to enter career positions, but this is not common. Some college students work part time as recreation workers while earning degrees.

A bachelor's degree and experience are preferred for most recreation supervisor jobs and required for most higher-level administrator jobs. However, increasing numbers of recreation workers who aspire to administrator positions are obtaining master's degrees in parks and recreation or related disciplines. Also, many persons in other disciplines, including social work, forestry, and resource management, pursue graduate degrees in recreation.

Programs leading to an associate or bachelor's degree in parks and recreation, leisure studies, or related fields are offered at several hundred colleges and universities. Many also offer master's or doctoral degrees in this field.

In 1997, 93 bachelor's degree programs in parks and recreation were accredited by the National Recreation and Park Association (NRPA). Accredited programs provide broad exposure to the history, theory, and philosophy of park and recreation management. Courses offered include community organization, supervision and administration, recreational needs of special populations, such as older adults or the disabled, and supervised fieldwork. Students may specialize in areas such as therapeutic recreation, park management, outdoor recreation, industrial or commercial recreation, and camp management.

The American Camping Association offers workshops and courses for experienced camp directors at different times and locations throughout the year. Some national youth associations offer training courses for camp directors at the local and regional levels.

Persons planning recreation careers should be outgoing, good at motivating people, and sensitive to the needs of others. Good health and physical fitness are required. Activity planning calls for creativity and resourcefulness. Willingness to accept responsibility and the ability to exercise good judgment are important qualities since recreation personnel often work without close supervision. Part-time or summer recreation work experience while in high school or college may help students decide whether their interests really point to a human services career. Such experience also may increase their leadership skills and understanding of people.

Individuals contemplating careers in recreation at the supervisory or administrative level should develop managerial skills. College courses in management, business administration, accounting, and personnel management are likely to be useful.

Certification for this field is offered by the NRPA National Certification Board. The National Recreation and Parks Association, along with its State chapters, offers certification as a Certified Leisure Professional (CLP) for those with a college degree in recreation, and as a Certified Leisure Technician (CLT) for those with less than 4 years of college. Other NRPA certifications include Certified Leisure Provisional Professional (CLPP), Certified Playground Inspector (CPI), and Aquatic Facility Operations (AFO) Certification. Continuing education is necessary to remain certified.

Certification is not usually required for employment or advancement in this field, but it is an asset. Employers choosing among qualified job applicants may opt to hire the person with a demonstrated record of professional achievement represented by certification.

Job Outlook

Competition will remain keen for full-time career positions in recreation. All college graduates are eligible for recreation jobs, regardless of major. Also, many high school and junior college graduates are eligible, so the number of full-time career jobseekers often greatly exceed the number of job openings. Opportunities for staff positions should be best for persons with experience gained in part-time or seasonal recreation jobs, together with formal recreation training. Those with graduate degrees should have the best opportunities for supervisory or administrative positions.

Prospects are better for the large number of temporary seasonal jobs. These positions, typically filled by high school or college students, do not generally have formal education requirements and are open to anyone with the desired personal qualities. Employers compete for a share of the vacationing student labor force, and, while salaries in recreation are often lower than those in other fields, the nature of the work and the opportunity to work outdoors is attractive to many. Seasonal employment prospects should be good for applicants with specialized training and certification in an activity like swimming. These workers may obtain jobs as program directors.

Employment of recreation workers is expected to grow faster than the average for all occupations through the year 2006 as growing numbers of people possess both the time and the money to enjoy leisure services. Growth in these jobs will also stem from increased interest in fitness and health and the rising demand for recreational opportunities for older adults in senior centers and retirement communities. However, overall employment in local government—where half of all recreation workers are employed—is expected to grow more slowly than in other industries due to budget constraints, and some local park and recreation departments are expected to do less hiring for permanent, full-time positions than in the past. As a result, this sector's share of recreation worker employment will vary widely by region, since resources as well as priorities for public services differ from one community to another. Thus, hiring prospects for recreation workers will be much better in some park and recreation departments, but worse in others.

Recreation worker jobs should also increase in social services—more recreation workers will be needed to develop and lead activity programs in senior centers, halfway houses, children's homes, and daycare programs for the mentally retarded or developmentally disabled. Similarly, the increasing elderly population will spur job growth in nursing homes and other personal care facilities where recreation activities are becoming more important.

Recreation worker jobs in employee services and recreation will continue to increase as more businesses recognize the benefits to their employees of recreation programs and other services such as wellness programs and elder care. Job growth will also occur in the commercial recreation industry, composed of amusement parks, athletic clubs, camps, sports clinics, and swimming pools, for example.

Earnings

Median annual earnings of recreation workers who worked full time in 1996 were about $18,700, significantly lower than the median of $25,600 for workers in all occupations. The middle 50 percent earned between about $12,900 and $28,900, while the top 10 percent earned $37,500 or more. However, earnings of recreation directors and others in supervisory or managerial positions can be substantially higher.

Most public and private recreation agencies provide full-time recreation workers with typical benefits; part-time workers receive few, if any, benefits.

Related Occupations

Recreation workers must exhibit leadership and sensitivity in dealing with people. Other occupations that require similar personal qualities include recreational therapists, social workers, parole officers, human relations counselors, school counselors, clinical and counseling psychologists, and teachers.

Sources of Additional Information

For information on jobs in recreation, contact employers such as local government departments of parks and recreation, nursing and personal care facilities, and YMCA's.

Ordering information for materials describing careers and academic programs in recreation is available from:

- National Recreation and Park Association, Division of Professional Services, 2775 South Quincy St., Suite 300, Arlington, VA 22206. Homepage: http://www.nrpa.org

For information on careers in employee services and corporate recreation, contact:

- National Employee Services and Recreation Association, 2211 York Rd., Suite 207, Oakbrook, IL 60521

For information on careers in camping and summer counselor opportunities, contact:

- American Camping Association, 5000 State Rd. 67 North, Martinsville, IN 46151

School Teachers—Kindergarten, Elementary, and Secondary

(D.O.T. 091.221, .227; 092.227-010, -014; 099.224-010, .227-022)

Significant Points

- Public school teachers must have a bachelor's degree, complete an approved teacher education program, and be licensed; some States require a master's degree.
- Many States offer alternative licensure programs to attract people into teaching and to fill certain jobs.
- Employment growth for secondary school teachers will be more rapid than for kindergarten and elementary school teachers due to student enrollments, but job outlook will vary by geographic area and by subject specialty.

Nature of the Work

Teachers act as facilitators or coaches, using interactive discussions and "hands-on" learning to help students learn and apply concepts in subjects such as science, mathematics, or English. As teachers move away from the traditional repetitive drill approaches and rote memorization, they are using more "props" or "manipulatives" to help children understand abstract concepts, solve problems, and develop critical thought processes. For example, they teach the concepts of numbers or adding and subtracting by playing board games. As children get older, they use more sophisticated materials such as tape recorders, science apparatus, cameras, or computers.

Many classes are becoming less structured, with students working in groups to discuss and solve problems together. Preparing students for the future workforce is the major stimulus generating the changes in education. To be prepared, students must be able to interact with others, adapt to new technology, and logically think through problems. Teachers provide the tools and environment for their students to develop these skills.

Kindergarten and elementary school teachers play a vital role in the development of children. What children learn and experience during their early years can shape their views of themselves and the world, and affect later success or failure in school, work, and their personal lives. Kindergarten and elementary school teachers introduce children to numbers, language, science, and social studies. They use games, music, artwork, films, slides, computers, and other tools to teach basic skills.

Most elementary school teachers instruct one class of children in several subjects. In some schools, two or more teachers work as a team and are jointly responsible for a group of students in at least one subject. In other schools, a teacher may teach one special subject—usually music, art, reading, science, arithmetic, or physical education—to a number of classes. A small but growing number of teachers instruct multilevel classrooms, with students at several different learning levels.

Secondary school teachers help students delve more deeply into subjects introduced in elementary school and expose them to more information about the world and themselves. Secondary school teachers specialize in a specific subject, such as English, Spanish, mathematics, history, or biology. They teach a variety of related courses—for example, American history, contemporary American problems, and world geography.

Special education teachers—who instruct elementary and secondary school students who have a variety of disabilities—are discussed separately in this section of the *Handbook*.

Teachers may use films, slides, overhead projectors, and the latest technology in teaching, including computers, telecommunication systems, and video discs. Use of computer resources, such as educational software and the Internet, exposes students to a vast range of experiences and promotes interactive learning. Through the Internet, American students can communicate with students in other countries to share personal experiences. Students also use the Internet for individual research projects and information gathering. Computers are used in other classroom activities as well, from helping students solve math problems to learning English as a second language. Teachers may also use computers to record grades and for other administrative and clerical duties. Teachers must continually update their skills to use the latest technology in the classroom.

Teachers often work with students from varied ethnic, racial, and religious backgrounds. With growing minority populations in many parts of the country, it is important for teachers to establish rapport with a diverse student population. Accordingly, some schools offer training to help teachers enhance their awareness and understanding of different cultures. Teachers may also include multicultural programming in their lesson plans to address the needs of all students, regardless of their cultural background.

Classroom presentations are designed by teachers to meet student needs and abilities. They also work with students individually. Teachers plan, evaluate, and assign lessons; prepare, administer, and grade tests; listen to oral presentations; and maintain classroom discipline. They observe and evaluate a student's performance and potential, and increasingly use new assessment methods. For example, teachers may examine a portfolio of a student's artwork or writing at the end of a learning period to judge the student's overall progress. They then provide additional assistance in areas where a student needs help. Teachers also grade papers, prepare report cards, and meet with parents and school staff to discuss a student's academic progress or personal problems.

In addition to classroom activities, teachers oversee study halls and homerooms and supervise extracurricular activities. They identify physical or mental problems and refer students to the proper resource

Teams use interactive discussions and hands-on learning in the classroom.

or agency for diagnosis and treatment. Secondary school teachers occasionally assist students in choosing courses, colleges, and careers. Teachers also participate in education conferences and workshops.

In recent years, site-based management, which allows teachers and parents to participate actively in management decisions, has gained popularity. In many schools, teachers are increasingly involved in making decisions regarding the budget, personnel, textbook choices, curriculum design, and teaching methods.

Working Conditions

Seeing students develop new skills and gain an appreciation of knowledge and learning can be very rewarding. However, teaching may be frustrating when dealing with unmotivated and disrespectful students. Teachers may also experience stress when dealing with large classes, students from disadvantaged or multicultural backgrounds, and heavy workloads.

Teachers face isolation from their colleagues since they often work alone in a classroom of students. However, this autonomy provides teachers considerable freedom to choose their own teaching styles and methods.

Including school duties performed outside the classroom, many teachers work more than 40 hours a week. Most teachers work the traditional 10-month school year with a 2-month vacation during the summer. Those on the 10-month schedule may teach in summer sessions, take other jobs, travel, or pursue other personal interests. Many enroll in college courses or workshops to continue their education. Teachers in districts with a year-round schedule typically work 8 weeks, are on vacation for 1 week, and have a 5-week midwinter break.

Most States have tenure laws that prevent teachers from being fired without just cause and due process. Teachers may obtain tenure after they have satisfactorily completed a probationary period of teaching, normally 3 years. Tenure does not absolutely guarantee a job, but it does provide some security.

Employment

Teachers held about 3.1 million jobs in 1996. Of those, about 1.7 million were kindergarten and elementary school teachers, and 1.4 million were secondary school teachers. Employment is distributed geographically, much the same as the population.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require public school teachers to be licensed. Licensure is not required for teachers in private schools. Usually licensure is granted by the State board of education or a licensure advisory committee. Teachers may be licensed to teach the early childhood grades (usually nursery school through grade 3), the elementary grades (grades 1 through 6 or 8), the middle grades (grades 5 through 8), a secondary education subject area (usually grades 7 through 12), or a special subject, such as reading or music (usually grades K through 12).

Requirements for regular licenses vary by State. However, all States require a bachelor's degree and completion of an approved teacher training program with a prescribed number of subject and education credits and supervised practice teaching. Some States require specific minimum grade point averages for teacher licensure. Some States require teachers to obtain a master's degree in education, which involves at least 1 year of additional coursework beyond the bachelor's degree with a specialization in a particular subject.

Almost all States require applicants for teacher licensure to be tested for competency in basic skills such as reading and writing, teaching skills, or subject matter proficiency. Most States require continuing education for renewal of the teacher's license. Many States have reciprocity agreements that make it easier for teachers licensed in one State to become licensed in another.

Increasingly, many States are moving towards implementing performance-based standards for licensure, which require passing a rigorous comprehensive teaching examination to obtain provisional licensure, and then demonstrating satisfactory teaching performance over an extended period of time to obtain full licensure.

Many States offer alternative teacher licensure programs for people who have bachelor's degrees in the subject they will teach, but lack the necessary education courses required for a regular license. Alternative licensure programs were originally designed to ease teacher shortages in certain subjects, such as mathematics and science. The programs have expanded to attract other people into teaching, including recent college graduates and midcareer changers. In some programs, individuals begin teaching quickly under provisional licensure. After working under the close supervision of experienced educators for 1 or 2 years while taking education courses outside school hours, they receive regular licensure if they have progressed satisfactorily. Under other programs, college graduates who do not meet licensure requirements take only those courses that they lack, and then become licensed. This may take 1 or 2 semesters of full-time study. States may issue emergency licenses to individuals who do not meet requirements for a regular license when schools cannot attract enough qualified teachers to fill positions. Teachers who need licensure may enter programs that grant a master's degree in education, as well as licensure.

In recent years, the National Board for Professional Teaching Standards began offering voluntary national certification for teachers. To become nationally certified, teachers must prove their aptitude by compiling a portfolio showing their work in the classroom, and by passing a written assessment and evaluation of their teaching knowledge. A teacher who is nationally certified may find it easier to obtain employment in another State. Certified teachers may also earn higher salaries, have more senior titles, and be eligible for more bonuses than noncertified teachers. While all States recognize national certification, however, many States have not established policies on specific benefits of holding national certification, such as salary differentials or reimbursement of certification fees.

The National Council for Accreditation of Teacher Education currently accredits over 500 teacher education programs across the United States. Generally, 4-year colleges require students to wait until their sophomore year before applying for admission to teacher education programs. Traditional education programs for kindergarten and elementary school teachers include courses—designed specifically for those preparing to teach—in mathematics, physical science, social science, music, art, and literature, as well as prescribed professional education courses, such as philosophy of education, psychology of learning, and teaching methods. Aspiring secondary school teachers either major in the subject they plan to teach while also taking education courses, or major in education and take subject courses. Teacher education programs are now required to include classes in the use of computers and other technologies to maintain accreditation. Most programs require students to perform student teaching.

Many States now offer professional development schools, which are partnerships between universities and elementary or secondary schools. Students enter these 1-year programs after completion of their bachelor's degree. Professional development schools merge theory with practice and allow the student to experience a year of teaching firsthand, with professional guidance.

In addition to being knowledgeable in their subject, the ability to communicate, inspire trust and confidence, and motivate students, as well as understand their educational and emotional needs, is essential for teachers. Teachers must be able to recognize and respond to individual differences in students, and employ different teaching methods that will result in high student achievement. They also should be organized, dependable, patient, and creative. Teachers must also be able to work cooperatively and communicate effectively with other teaching staff, support staff, parents, and other members of the community.

With additional preparation, teachers may move into positions as school librarians, reading specialists, curriculum specialists, or guidance counselors. Teachers may become administrators or supervisors, although the number of these positions is limited and competition for these desirable positions can be intense. In some systems, highly qualified, experienced teachers can become senior or mentor teachers, with higher pay and additional responsibilities. They guide and assist less experienced teachers while keeping most of their teaching responsibilities.

Job Outlook

The job market for teachers varies widely by geographic area and by subject specialty. Many inner cities—characterized by high crime rates, high poverty rates, and overcrowded conditions—and rural areas—characterized by their remote location and relatively low salaries—have difficulty attracting enough teachers, so job prospects should continue to be better in these areas than in suburban districts. Currently, many school districts have difficulty hiring qualified teachers in some subjects—mathematics, science (especially chemistry and physics), bilingual education, and computer science. Specialties that currently have an abundance of qualified teachers include general elementary education, English, art, physical education, and social studies. Teachers who are geographically mobile and who obtain licensure in more than one subject should have a distinct advantage in finding a job. With enrollments of minorities increasing, coupled with a shortage of minority teachers, efforts to recruit minority teachers should intensify. Also, the number of non-English speaking students has grown dramatically, especially in California and Florida which have large Spanish-speaking student populations, creating demand for bilingual teachers and those who speak English as a second language (ESL).

Overall employment of kindergarten, elementary, and secondary school teachers is expected to increase about as fast as the average for all occupations through the year 2006. The expected retirement of a large number of teachers currently in their 40s and 50s should open up many additional jobs. However, projected employment growth varies among individual teaching occupations.

Employment of secondary school teachers is expected to grow faster than the average for all occupations through the year 2006, while average employment growth is projected for kindergarten and elementary school teachers. Assuming relatively little change in average class size, employment growth of teachers depends on population growth rates and corresponding student enrollments. Enrollment of 14- to 17-year-olds is expected to grow through the year 2006 (see chart 1). Enrollment of 5- to 13-year olds also is projected to increase, but at a slower rate, through the year 2002, and then decline (see chart 2).

The number of teachers employed is also dependent on State and local expenditures for education. Pressures from taxpayers to limit spending could result in fewer teachers than projected; pressures to spend more to improve the quality of education could increase the teacher workforce.

The supply of teachers also is expected to increase in response to reports of improved job prospects, more teacher involvement in school policy, and greater public interest in education. In recent years, the total number of bachelor's and master's degrees granted in education has steadily increased. In addition, more teachers will be drawn from a reserve pool of career changers, substitute teachers, and teachers completing alternative certification programs, relocating to different schools, and reentering the workforce.

Chart 1. High school enrollments are expected to increase throughout the 1996-2006 period.

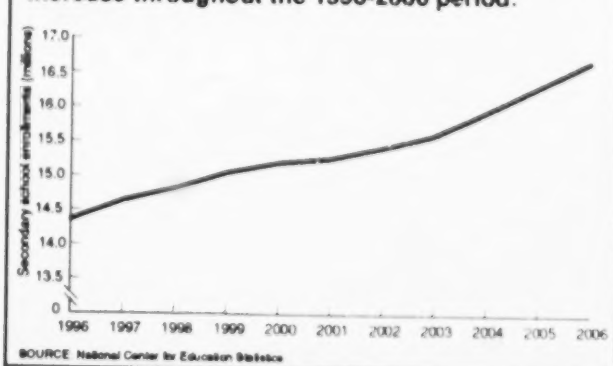
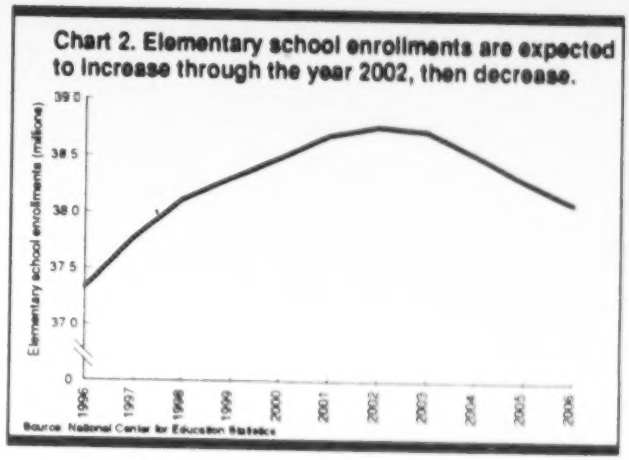


Chart 2. Elementary school enrollments are expected to increase through the year 2002, then decrease.



Earnings

According to the National Education Association, the estimated average salary of all public elementary and secondary school teachers in the 1995-96 school year was $37,900. Public secondary school teachers averaged about $38,600 a year, while public elementary school teachers averaged $37,300. Private school teachers generally earn less than public school teachers.

In 1996, over half of all public school teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.

In some schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Some teachers earn extra income during the summer working in the school system or in other jobs.

Related Occupations

Kindergarten, elementary, and secondary school teaching requires a wide variety of skills and aptitudes, including a talent for working with children; organizational, administrative, and recordkeeping abilities; research and communication skills; the power to influence, motivate, and train others; patience; and creativity. Workers in other occupations requiring some of these aptitudes include college and university faculty, counselors, education administrators, employment interviewers, librarians, preschool teachers, public relations specialists, sales representatives, social workers, and trainers and employee development specialists.

Sources of Additional Information

Information on licensure or certification requirements and approved teacher training institutions is available from local school systems and State departments of education.

Information on teachers' unions and education-related issues may be obtained from:

- American Federation of Teachers, 555 New Jersey Ave. NW., Washington, DC 20001
- National Education Association, 1201 16th St. NW., Washington, DC 20036

A list of institutions with accredited teacher education programs can be obtained from:

- National Council for Accreditation of Teacher Education, 2010 Massachusetts Ave. NW., Suite 500, Washington, DC 20036

For information on voluntary national teacher certification requirements, contact:

- National Board for Professional Teaching Standards, 26555 Evergreen Rd., Suite 400, Southfield, MI 48076

Social and Human Service Assistants

(D.O.T. 195.367 except -026 and -030)

Significant Points

- Social and human service assistants ranks among the top 10 fastest growing occupations.
- Job opportunities should be excellent, particularly for applicants with appropriate postsecondary education, but pay is low.

Nature of the Work

Social and human service assistants is a generic term for people with various job titles, including social service assistant, case management aide, social work assistant, residential counselor, community support worker, alcohol or drug abuse counselor, mental health technician, child-care worker, community outreach worker, life skill counselor, and gerontology aide. They generally work under the direction of professionals from a wide variety of fields, such as nursing, psychiatry, psychology, rehabilitation, or social work. The amount of responsibility and supervision they are given varies a great deal. Some are on their own most of the time and have little direct supervision; others work under close direction.

Social and human service assistants provide direct and indirect client services. They assess clients' needs, establish their eligibility for benefits and services, and help clients obtain them. They examine financial documents such as rent receipts and tax returns to determine whether the client is eligible for food stamps, Medicaid, welfare, and other human service programs. They also arrange for transportation and escorts, if necessary, and provide emotional support. Social and human service assistants monitor and keep case records on clients and report progress to supervisors. Social and human service assistants also may transport or accompany clients to group meal sites, adult daycare programs, or doctors' offices; telephone or visit clients' homes to make sure services are being received; or help resolve disagreements, such as those between tenants and landlords. They may also help clients complete applications for financial assistance or assist with daily living needs.

Social and human service assistants play a variety of roles in community settings. They may organize and lead group activities, assist clients in need of counseling or crisis intervention, or administer a food bank or emergency fuel program. In halfway houses, group homes, and government-supported housing programs, they assist adult residents who need supervision in personal hygiene and daily living skills. They review clients' records, ensure they take correct doses of medication, talk with their families, and confer with medical personnel to gain better insight into clients' backgrounds and needs. They also provide emotional support and help clients become involved in community recreation programs and other activities.

In psychiatric hospitals, rehabilitation programs, and outpatient clinics, they may help clients master everyday living skills and teach them how to communicate more effectively and get along better with others. They support the client's participation in the treatment plan, such as individual or group counseling and occupational therapy.

Working Conditions

Working conditions of social and human service assistants vary. They work in offices, group homes, shelters, day programs, sheltered workshops, hospitals, clinics, and in the field visiting clients. Most work a regular 40-hour week, although some work may be in the evening and on weekends. Social and human service assistants in residential settings generally work in shifts because residents need supervision around the clock.

The work, while satisfying, can be emotionally draining. Understaffing and relatively low pay may add to the pressure. Turnover is reported to be high, especially among workers without academic preparation for this field.

Human service assistants help the elderly.

Employment

Social and human service assistants held about 178,000 jobs in 1996. About 1 in 3 were employed by State and local governments, primarily in public welfare agencies and facilities for mentally disabled and developmentally delayed individuals. Another third worked in private social or human services agencies, offering a variety of services, including adult daycare, group meals, crisis intervention, counseling, and job training. Many social and human service assistants supervised residents of group homes and halfway houses. Social and human service assistants also held jobs in clinics, detoxification units, community mental health centers, psychiatric hospitals, day treatment programs, and sheltered workshops.

Training, Other Qualifications, and Advancement

While some employers hire high school graduates, most prefer applicants with some college preparation in human services, social work, or one of the social or behavioral sciences. Some prefer to hire persons with a 4-year college degree. The educational attainment of social and human service assistants often influences the kind of work they are assigned and the amount of responsibility entrusted to them. Workers with no more than a high school education are likely to receive on-the-job training to work in direct care services, while those with a college degree might be assigned to do supportive counseling, coordinate program activities, or manage a group home. Employers may also look for experience in other occupations, leadership experience in an organization, or human service volunteer exposure. Some enter the field on the basis of courses in human services, psychology, rehabilitation, social work, sociology, or special education. Most employers provide in-service training such as seminars and workshops.

Because so many human services jobs involve direct contact with people who are vulnerable to exploitation or mistreatment, employers try to select applicants with appropriate personal qualifications. Relevant academic preparation is generally required, and volunteer or work experience is preferred. A strong desire to help others, patience, and understanding are highly valued characteristics. Other important personal traits include communication skills, a strong sense of responsibility, and the ability to manage time effectively. Hiring requirements in group homes tend to be more stringent than in other settings. In some settings, applicants may need a valid driver's license and must meet the Criminal Offense Record Investigation (CORI) requirement. Special licensure or State certifications may also apply.

In 1996, about 380 certificate and associate degree programs in human services or mental health were offered at community and junior colleges, vocational-technical institutes, and other postsecondary institutions. In addition, approximately 200 programs offered a bachelor's degree in human services. Master's degree programs in human services administration are offered as well.

Generally, academic programs in this field educate students for specialized roles. Human services programs have a core curriculum that trains students in observation and recording, interviewing, communication techniques, behavior management, group dynamics, counseling, crisis intervention, case management, and referral. General education courses in liberal arts, sciences, and the humanities are also part of the curriculum. Many degree programs require completion of an internship.

Formal education is almost always necessary for advancement. In general, advancement requires a bachelor's or master's degree in counseling, rehabilitation, social work, or a related field.

Job Outlook

Opportunities for social and human service assistants are expected to be excellent, particularly for applicants with appropriate postsecondary education. The number of social and human service assistants is projected to grow much faster than the average for all occupations between 1996 and the year 2006—ranking among the most rapidly growing occupations. The need to replace workers who retire or stop working for other reasons will create additional job opportunities. These jobs are not attractive to everyone due to the emotionally draining work and relatively low pay, so qualified applicants should have little difficulty finding employment.

Opportunities are expected to be best in job training programs, residential settings, and private social service agencies, which include such services as adult daycare and meal delivery programs. Demand for these services will expand with the growing number of older people, who are more likely to need services. In addition, social and human service assistants will continue to be needed to provide services to the mentally disabled and developmentally delayed, those with substance-abuse problems, the homeless, and pregnant teenagers. Faced with rapid growth in the demand for services, but slower growth in resources to provide the services, employers are expected to rely increasingly on social and human service assistants rather than more highly trained workers, such as social workers, who command higher pay.

Job training programs are expected to require additional social and human service assistants as the economy grows and businesses change their mode of production, requiring workers to be retrained. Social and human service assistants help determine workers' eligibility for public assistance programs and help them obtain services while unemployed.

Residential settings should expand also as pressures to respond to the needs of the chronically mentally ill persist. For many years, chronic mental patients have been deinstitutionalized and left to their own devices. Now, more community-based programs, supported independent living sites, and group residences are expected to be established to house and assist the homeless and chronically mentally ill, and demand for social and human service assistants will increase accordingly.

The number of jobs for social and human service assistants will grow more rapidly than overall employment in State and local governments. State and local governments employ most of their social and human service assistants in corrections and public assistance departments. Corrections departments are growing faster than other areas of government, so social and human service assistants should find that their job opportunities increase along with other corrections jobs. Public assistance programs have been employing more social and human service assistants in an attempt to employ fewer social workers, who are more educated and higher paid.

Earnings

Based on limited information, starting salaries for social and human service assistants ranged from about $15,000 to $24,000 a year in 1997. Experienced workers generally earned between $20,000 and $30,000 annually, depending on their education, experience, and employer.

Related Occupations

Workers in other occupations that require skills similar to those of social and human service assistants include social workers, religious workers, occupational therapy assistants, physical therapy assistants, psychiatric aides, and activity leaders.

Sources of Additional Information

Information on academic programs in human services may be found in most directories of 2- and 4-year colleges, available at libraries or career counseling centers.

For information on programs and careers in human services, contact:

- National Organization for Human Service Education, Brookdale Community College, Lyncroft, NJ 07738.
- Council for Standards in Human Service Education, Northern Essex Community College, Haverhill, MA 01830.

Information on job openings may be available from State employment service offices or directly from city, county, or State departments of health, mental health and mental retardation, and human resources.

Social Workers

(D.O.T. 189.267-010, 195.107, .137, .164, .167-010, -014, .267-018, -022, and .367-026)

Significant Points

- A bachelor's degree is the minimum requirement for many entry-level jobs; however, a master's degree in social work (MSW) is generally required for advancement.
- Employment is projected to grow faster than average.
- Competition for jobs is stronger in cities where training programs for social workers are prevalent; rural areas often find it difficult to attract and retain qualified staff.

Nature of the Work

Social work is a profession for those with a strong desire to help people. Social workers help people deal with their relationships with others, solve their personal, family, and community problems; and grow and develop as they learn to cope with or shape the social and environmental forces affecting daily life. Social workers often encounter clients facing a life-threatening disease or a social problem requiring a quick solution. These situations may include inadequate housing, unemployment, lack of job skills, financial distress, serious illness or disability, substance abuse, unwanted pregnancy, or antisocial behavior. They also assist families that have serious conflicts, including those involving child or spousal abuse.

Social workers practice in a variety of settings, including hospitals, from the obstetrics unit to the intensive care unit; in schools, helping children, teachers, and parents cope with problems; in mental health clinics and psychiatric hospitals; and in public agencies, from the employment office to the public welfare department. Through direct counseling, social workers help clients identify their concerns, consider solutions, and find resources. Often, they refer clients to specialists in various areas, including debt counseling, child care or elder care, public assistance or other benefits, or alcohol or drug rehabilitation programs. Social workers typically arrange for services in consultation with clients, following through to assure the services are helpful. They may review eligibility requirements, fill out forms and applications, arrange for services, visit clients on a regular basis, and provide support during crises.

Most social workers specialize—for example, in child welfare and family services, mental health, or school social work. Clinical social workers offer psychotherapy or counseling and a range of services in public agencies and clinics, and in private practice. Other social workers are employed in community organization, administration, or research.

Those specializing in child welfare or family services may counsel children and youths who have difficulty adjusting socially, advise parents on how to care for disabled children, or arrange for home-

maker services during a parent's illness. If children have serious problems in school, child welfare workers may consult with parents, teachers, and counselors to identify underlying causes and develop plans for treatment. Some social workers assist single parents, arrange adoptions, and help find foster homes for neglected, abandoned, or abused children. Child welfare workers also work in residential institutions for children and adolescents.

Social workers in child or adult protective services investigate reports of abuse and neglect and intervene if necessary. They may institute legal action to remove children from homes and place them temporarily in an emergency shelter or with a foster family.

Mental health social workers provide services for persons with mental or emotional problems, such as individual and group therapy, outreach, crisis intervention, social rehabilitation, and training in skills of everyday living. They may also help plan for supportive services to ease patients' return to the community. (Counselors and psychologists, who may provide similar services, are discussed elsewhere in the *Handbook*.)

Health care social workers help patients and their families cope with chronic, acute, or terminal illnesses and handle problems that may stand in the way of recovery or rehabilitation. They may organize support groups for families of patients suffering from cancer, AIDS, Alzheimer's disease, or other illnesses. They also advise family caregivers, counsel patients, and help plan for their needs after discharge by arranging for at-home services—from meals-on-wheels to oxygen equipment. Some work on interdisciplinary teams that evaluate certain kinds of patients—geriatric or organ transplant patients, for example.

School social workers diagnose students' problems and arrange needed services, counsel children in trouble, and help integrate disabled students into the general school population. School social workers deal with problems such as student pregnancy, misbehavior in class, and excessive absences. They also advise teachers on how to deal with problem students.

Criminal justice social workers make recommendations to courts, prepare pre-sentencing assessments, and provide services for prison inmates and their families. Probation and parole officers provide similar services to individuals sentenced by a court to parole or probation.

Occupational social workers generally work in a corporation's personnel department or health unit. Through employee assistance programs, they help workers cope with job-related pressures or personal problems that affect the quality of their work. They often offer direct counseling to employees whose performance is hindered by emotional or family problems or substance abuse. They also develop education programs and refer workers to specialized community programs.

Some social workers specialize in gerontological services. They run support groups for family caregivers or for the adult children of aging parents, advise elderly people or family members about the choices in such areas as housing, transportation, and long-term care, and coordinate and monitor services.

Social workers also focus on policy and planning. They help develop programs to address such issues as child abuse, homelessness, substance abuse, poverty, and violence. These workers research and analyze policies, programs, and regulations. They identify social problems and suggest legislative and other solutions. They may help raise funds or write grants to support these programs.

Working Conditions

Although some social workers work a standard 40-hour week, many work some evenings and weekends to meet with clients, attend community meetings, and handle emergencies. Some, particularly in voluntary nonprofit agencies, work part time. They may spend most of their time in an office or residential facility, but may also travel locally to visit clients or meet with service providers. Some have several offices within a local area.

The work, while satisfying, can be emotionally draining. Understaffing and large caseloads add to the pressure in some agencies.

Employment

Social workers held about 585,000 jobs in 1996. About 4 out of 10 jobs were in State, county, or municipal government agencies, primarily in departments of health and human resources, mental health, social services, child welfare, housing, education, and corrections. As government increasingly contracts out social services, many jobs are likely to shift from government to private organizations in the future. Most jobs in the private sector were in social service agencies, community and religious organizations, hospitals, nursing homes, or home health agencies.

Social workers often specialize in fields such as family services, mental health, or school social work.

Although most social workers are employed in cities or suburbs, some work in rural areas.

Training, Other Qualifications, and Advancement

A bachelor's degree is the minimum requirement for many entry-level jobs. Besides the bachelor's in social work (BSW), undergraduate majors in psychology, sociology, and related fields satisfy hiring requirements in some agencies, especially small community agencies. A master's degree in social work (MSW) is generally necessary for positions in health and mental health settings. Jobs in public agencies may also require an MSW. Supervisory, administrative, and staff training positions usually require at least an MSW. College and university teaching positions and most research appointments normally require a doctorate in social work.

In 1996, the Council on Social Work Education accredited over 430 BSW programs and over 130 MSW programs. There were 55 doctoral programs for Ph.D.'s in social work and DSW's (Doctor of Social Work). BSW programs prepare graduates for direct service positions such as case worker or group worker. They include courses in social work practice, social welfare policies, human behavior and the social environment, and social research methods. Accredited BSW programs require at least 400 hours of supervised field experience.

An MSW degree prepares graduates to perform assessments, manage cases, and supervise other workers. Master's programs usually last 2 years and include 900 hours of supervised field instruction, or internship. Entry into an MSW program does not require a bachelor's in social work, but courses in psychology, biology, sociology, economics, political science, history, social anthropology, urban studies, and social work are recommended. In addition, a second language can be very helpful. Some schools offer an accelerated MSW program for those with a BSW.

Since 1993, all States and the District of Columbia have had licensing, certification, or registration laws regarding social work practice and the use of professional titles. Standards for licensing vary by State. In addition, voluntary certification is offered by the National Association of Social Workers (NASW), which grants the title ACSW (Academy of Certified Social Worker) or ACBSW (Academy of Certified Baccalaureate Social Worker) to those who qualify. For clinical social workers, who are granted the title QCSW (Qualified Clinical Social Worker), professional credentials include listing in the *NASW Register of Clinical Social Workers*. Advanced credentials include the

NASW Diplomate in Clinical Social Work, and School Social Work Specialist. An advanced credential is also offered by the *Directory of American Board of Examiners in Clinical Social Work*. Credentials are particularly important for those in private practice; some health insurance providers require them for reimbursement.

Social workers should be emotionally mature, objective, and sensitive to people and their problems. They must be able to handle responsibility, work independently, and maintain good working relationships with clients and coworkers. Volunteer or paid jobs as a social work aide offer ways of testing one's interest in this field.

Advancement to supervisor, program manager, assistant director, or executive director of a social service agency or department is possible but generally requires an MSW degree and related work experience. Although some social workers with a BSW may be promoted to these positions after gaining experience, some employers choose to hire managers directly from MSW programs that focus specifically on management. These graduates often have little work experience but have an understanding of management through their education and training. Other career options for social workers include teaching, research, and consulting. Some help formulate government policies by analyzing and advocating policy positions in government agencies, in research institutions, and on legislators' staffs.

Some social workers go into private practice. Most private practitioners are clinical social workers who provide psychotherapy, usually paid through health insurance. Private practitioners must have an MSW and a period of supervised work experience. A network of contacts for referrals is also essential.

Job Outlook

Employment of social workers is expected to increase faster than the average for all occupations through the year 2006. The number of older people, who are more likely to need social services, is increasing rapidly. In addition, growing concern about crime, juvenile delinquency, and services for the mentally ill, the mentally retarded, AIDS patients, and individuals and families in crisis will spur demand for social workers. Many job openings will also stem from the need to replace social workers who leave the occupation.

As hospitals increasingly emphasize early discharge of patients in an effort to control costs, more social workers will be needed to ensure that the necessary medical and social services are in place when individuals leave the hospital. Social worker employment in home health care services is growing, not only because hospitals are releasing patients earlier, but because a large and growing number of people have impairments or disabilities that make it difficult to live at home without some form of assistance.

Employment of social workers in private social service agencies will grow, but not as rapidly as demand for their services. Agencies will increasingly restructure services and hire more lower-paid human services workers instead of social workers. Employment in government may grow in response to increasing needs for public welfare and family services; however, many of these jobs will be contracted out to private agencies. Additionally, employment levels will depend on government funding for various social service programs.

Employment of school social workers is expected to grow, due to expanded efforts to respond to rising rates of teen pregnancy and to the adjustment problems of immigrants and children from single-parent families. Moreover, continued emphasis on integrating disabled children into the general school population will lead to more jobs. Availability of State and local funding will dictate the actual job growth in schools, however.

Opportunities for social workers in private practice will expand because of the anticipated availability of funding from health insurance and public-sector contracts. Also, with increasing affluence, people will be better able to pay for professional help to deal with personal problems. The growing popularity of employee assistance programs is also expected to spur demand for private practitioners, some of whom provide social work services to corporations on a contractual basis.

Competition for social worker jobs is stronger in cities where training programs for social workers are prevalent; rural areas often find it difficult to attract and retain qualified staff.

Earnings

Based on limited information, social workers with an MSW had median earnings of about $35,000 in 1997, while social workers with a BSW earned about $25,000.

According to a Hay Group survey of acute care hospitals, the median annual salary of full-time social workers with a master's degree was $35,000 in 1997. The middle 50 percent earned between $32,300 and $38,700.

The average annual salary for all social workers in the Federal Government in nonsupervisory, supervisory, and managerial positions was about $46,900 in 1997.

Related Occupations

Through direct counseling or referral to other services, social workers help people solve a range of personal problems. Workers in occupations with similar duties include the clergy, mental health counselors, counseling psychologists, and human services workers.

Sources of Additional Information

For information about career opportunities in social work, contact:

- National Association of Social Workers, Career Information, 750 First St. NE., Suite 700, Washington, DC 20002-4241.
- National Network For Social Work Managers, Inc., 1316 New Hampshire Ave. NW., Suite 602, Washington, DC 20036.

An annual *Directory of Accredited BSW and MSW Programs* is available for a nominal charge from:

- Council on Social Work Education, 1600 Duke St., Alexandria, VA 22314-3421.

Special Education Teachers

(D.O.T. 094.107, 224, 227, 267; 099.227-042; 195.227-018)

Significant Points

- A bachelor's degree, completion of an approved teacher preparation program, and a license are required; many States require a master's degree.
- Many States offer alternative licensure programs to attract people into special education teaching jobs.
- Job openings arising from rapid employment growth and job turnover, coupled with a declining number of graduates from special education teaching programs, mean excellent job prospects; many school districts report shortages of qualified teachers.

Nature of the Work

Special education teachers work with children and youth who have a variety of disabilities. Most special education teachers instruct students at the elementary, middle, and secondary school level; although, some teachers work with infants and toddlers. Special education teachers design and modify instruction to meet a student's special needs. Teachers also work with students who have other special instructional needs, including those who are gifted and talented.

The various types of disabilities delineated in Government special education programs include specific learning disabilities, mental retardation, speech or language impairment, serious emotional disturbance, visual and hearing impairment, orthopedic impairment, autism, traumatic brain injury, and multiple disabilities. Students are classified under one of the categories, and special education teachers are prepared to work with specific groups.

Special education teachers use various techniques to promote learning. Depending on the disability, teaching methods can include individualized instruction, problem-solving assignments, and group or individual work. Special education teachers are legally required to help develop an Individualized Education Program (IEP) for each special education student. The IEP sets personalized goals for each student and is tailored to a student's individual learning style and

ability. This program includes a transition plan outlining specific steps to prepare special education students for middle school or high school, or in the case of older students, a job or postsecondary study. Teachers review the IEP with the student's parents, school administrators, and often the student's general education teacher. Teachers work closely with parents to inform them of their child's progress and suggest techniques to promote learning at home.

Teachers design curricula, assign work geared toward each student's ability, and grade papers and homework assignments. Special education teachers are involved in a student's behavioral as well as academic development. They help special education students develop emotionally, be comfortable in social situations, and be aware of socially acceptable behavior. Preparing special education students for daily life after graduation is an important aspect of the job. Teachers may help students with routine skills, such as balancing a check book, or provide them with career counseling.

As schools have become more inclusive, special education teachers and general education teachers increasingly work together in general education classrooms. Special education teachers help general educators adapt curriculum materials and teaching techniques to meet the needs of students with disabilities.

Special education teachers work in a variety of settings. Some have their own classrooms and teach classes comprised entirely of special education students; others work as special education resource teachers and offer individualized help to students in general education classrooms; and others teach along with general education teachers in classes composed of both general and special education students. Some teachers work in a resource room, where special education students work several hours a day, separate from their general education classroom. A significantly smaller proportion of special education teachers work in residential facilities or tutor students in homebound or hospital environments. Special education teachers who work with infants usually travel to the child's home to work with the child and his or her parents.

A large part of a special education teacher's job involves interacting with others. They communicate frequently with parents, social workers, school psychologists, occupational and physical therapists, school administrators, and other teachers.

Early identification of a child with special needs is another important part of a special education teacher's job. Early intervention is essential in educating these children.

Technology is playing an increasingly important role in special education. Special education teachers use specialized equipment such as computers with synthesized speech, interactive educational software programs, and audio tapes.

Working Conditions

Helping students with disabilities achieve goals, and making a difference in their lives can be highly rewarding. Special education teachers enjoy the challenge of working with these students and the opportunity to establish meaningful relationships. However, the work can also be emotionally and physically draining. Special education teachers are under considerable stress due to heavy workloads and tedious administrative tasks. They must produce a substantial amount of paperwork documenting each student's progress. Exacerbating this stress is the threat of litigation by students' parents if correct procedures are not followed, or if the parent feels their child is not receiving an adequate education. Some special educators feel they are not adequately supported by school administrators, and feel isolated from general education teachers. The physical and emotional demands of the job result in a high "burnout" rate.

Many schools offer year-round education for special education students, but most special education teachers work the traditional 10-month school year with a 2-month vacation during the summer.

Employment

Special education teachers held about 407,000 jobs in 1996. The majority of special education teachers were employed in elementary, middle, and secondary public schools. The rest worked in separate educational facilities—public or private—residential facilities, or in homebound or hospital environments.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require special education teachers to be licensed. Special education licensure varies by State. In many States, special education teachers receive a general education credential to teach kindergarten through grade 12. These teachers train in a specialty, such as learning disabilities or behavioral disorders. Some States offer general special education licensure, others license several different specialties within special education, while others require teachers to first obtain general education licensure and then additional licensure in special education. Usually licensure is granted by the State board of education or a licensure advisory committee.

All States require a bachelor's degree and completion of an approved teacher preparation program with a prescribed number of subject and education credits and supervised practice teaching. Many States require special education teachers to obtain a master's degree in special education, involving at least one year of additional coursework, including a specialization, beyond the bachelor's degree.

Some States have reciprocity agreements allowing special education teachers to transfer their licensure from one State to another, but many still require special education teachers to pass licensure requirements for that State. National certification standards for special education teachers are currently being developed by the National Board for Professional Teaching Standards.

About 700 colleges and universities across the United States offer programs in special education, including undergraduate, master's, and doctoral programs. Special education teachers usually undergo longer periods of training than general education teachers. Most bachelor's degree programs are 4-year programs including general and specialized courses in special education. However, an increasing number of institutions require a fifth year or other postbaccalaureate preparation. Courses include educational psychology, legal issues of special education, child growth and development, and knowledge and skills needed for teaching students with disabilities. Some programs require a specialization. Others offer generalized special education degrees, or study in several specialized areas. The last year of the program is usually spent student teaching in a classroom supervised by a certified teacher.

Alternative and emergency licensure is available in many States, due to the need to fill special education teaching positions. Alternative licensure is designed to bring college graduates and those changing careers into teaching more quickly. Requirements for alternative licensure may be less stringent than for regular licensure and vary by State. In some programs, individuals begin teaching quickly

Special education teachers design and modify instruction to meet a student's special needs.

under provisional licensure. They can obtain regular licensure by teaching under the supervision of licensed teachers for a period of 1 to 2 years while taking education courses. Emergency licensure is enacted when States are having difficulty finding licensed special education teachers to fill positions.

Special education teachers must be patient, able to motivate students, understanding of their students' special needs, and accepting of differences in others. Teachers must be creative and apply different types of teaching methods to reach students who are having difficulty. Communication and cooperation are essential traits because special education teachers spend a great deal of time interacting with others, including students, parents, and school faculty and administrators.

Special education teachers can advance to become supervisors or administrators. They may also earn advanced degrees and become instructors in colleges that prepare others for special education teaching. In some school systems, highly experienced teachers can become mentor teachers to less experienced ones; they provide guidance to these teachers while maintaining a light teaching load.

Job Outlook

Special education teachers have excellent job prospects, as many school districts report shortages of qualified teachers. Job outlook varies by geographic area and specialty. Positions in rural areas and inner cities are more plentiful than job openings in suburban or wealthy urban areas. Also, job opportunities may be better in certain specialties—such as speech or language impairments, and learning disabilities—due to the considerable shortages of teachers in these fields. Recent legislation encouraging early intervention and special education for infants, toddlers, and preschoolers has created a need for early childhood special education teachers. Special education teachers who are bilingual or have multicultural experience are also needed to work with an increasingly diverse student population.

Employment of special education teachers is expected to increase much faster than the average for all occupations through the year 2006, spurred by continued growth in the number of special education students needing services, legislation emphasizing training and employment for individuals with disabilities, growing public interest in individuals with special needs, and educational reform. The high "burnout" rate will lead to many additional job openings as special education teachers switch to general education or change careers altogether. Rapid employment growth and job turnover, coupled with a declining number of graduates from special education teaching programs, should result in a very favorable job market.

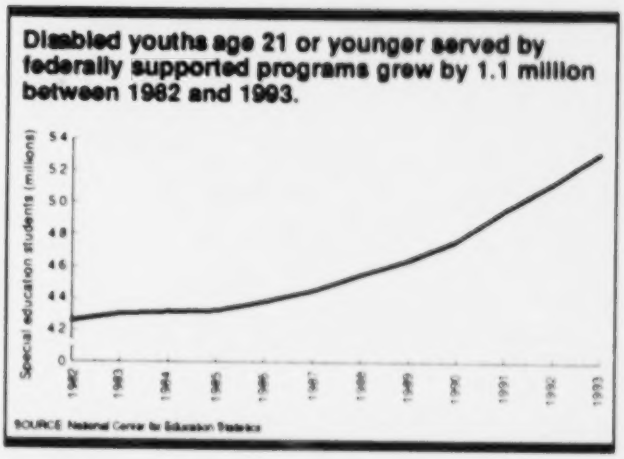
The number of students requiring special education services has been steadily increasing, as indicated by the accompanying chart. This trend is expected to continue due to legislation which expanded the age range of children receiving special education services to include those from birth to age 21; medical advances resulting in more survivors of accidents and illness; the postponement of childbirth by more women, resulting in a greater number of premature births and children born with birth defects; and growth in the general population.

The growing use of inclusive school settings, which integrate special education students into general education settings, will also lead to more reliance on special education teachers. The role of these teachers is expanding to include acting as a consultant to general education teachers, in addition to teaching special education students in resource rooms, general education classrooms, and separate classrooms made up entirely of special education students.

Earnings

Salaries of special education teachers follow the same scale as those for general education teachers. According to the National Education Association, the estimated average salary of all public elementary and secondary school teachers in the 1995-96 school year was $37,900. Public secondary school teachers averaged about $38,600 a year, while public elementary school teachers averaged $37,300. Private school teachers generally earn less than public school teachers.

In 1996, over half of all public school teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.



In some schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Some teachers earn extra income during the summer, working in the school system or in other jobs.

Related Occupations

Special education teachers work with students who have disabilities and special needs. Other occupations involved with the identification, evaluation, and development of students with disabilities include school psychologists, social workers, speech pathologists, rehabilitation counselors, adapted physical education teachers, special education technology specialists, and occupational, physical, creative arts, and recreational therapists.

Sources of Additional Information

For information on a career as a special education teacher, a list of accredited schools, financial aid information, and general information on special education-related personnel issues, contact:

- National Clearinghouse for Professions in Special Education, Council for Exceptional Children, 1920 Association Dr., Reston, VA 20191. Homepage: http://www.cec-sped.org

To learn more about the special education teacher certification and licensing requirements in your State, contact your State's department of education.

Teacher Aides

(D.O.T. 099.327, 219.467, 249.367-074, -086)

Significant Points

- Half of all teacher aides work part time.
- Educational requirements range from a high school diploma to some college training.
- Strong demand for aides to assist and monitor students, to provide teachers with clerical assistance, and to help teachers meet the education needs of a growing special education population will contribute to much faster than average employment growth.

Nature of the Work

Teacher aides, also called instructional aides or paraeducators, provide instructional and clerical support for classroom teachers, allowing teachers more time for lesson planning and teaching. Teacher aides tutor and assist children in learning class material using the teacher's lesson plans, providing students with individualized

attention. Aides also assist and supervise students in the cafeteria, schoolyard, school discipline center, or on field trips. They record grades, set up equipment, and help prepare materials for instruction.

In large school districts, some teacher aides are hired to perform exclusively non-instructional or clerical tasks, such as monitoring nonacademic settings. Playground and lunchroom attendants are examples of such aides. Most teacher aides, however, perform a combination of instructional and clerical duties. They generally instruct children, under the direction and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing or reinforcing class work, or helping them find information for reports. At the secondary school level, teacher aides often specialize in a certain subject, such as math or science. Aides often take charge of special projects and prepare equipment or exhibits, such as for a science demonstration. Some aides work in computer laboratories, assisting students using computers and educational software programs.

In addition to instructing, assisting, and supervising students, teacher aides grade tests and papers, check homework, keep health and attendance records, type, file, and duplicate materials. They also may stock supplies, operate audiovisual equipment, and keep classroom equipment in order.

Many teacher aides work extensively with special education students. Schools are becoming more inclusive, integrating special education students into general education classrooms. As a result, teacher aides in general education and special education classrooms increasingly assist students with disabilities. Aides may attend to a student's physical needs, including feeding, teaching good grooming habits, or assisting students riding the school bus. They also may provide personal attention to students with other special needs, such as those whose families live in poverty, or students who speak English as a second language or need remedial education. Aides help assess a student's progress by observing performance and recording relevant data.

Working Conditions

Half of all teacher aides work part time. Most aides who provide educational instruction work the traditional 9- to 10-month school year, usually in a classroom setting. Aides also may work outdoors supervising recess when weather allows, and spend much of their time standing, walking, or kneeling.

Seeing students develop and gain appreciation of the joy of learning can be very rewarding. However, working closely with students can be both physically and emotionally tiring. Teacher aides who work with special education students may perform more strenuous tasks, including lifting, as they help students with their daily routine. Those who perform clerical work may feel overwhelmed by tedious administrative duties, such as making copies or typing.

Employment

Teacher aides held about 981,000 jobs in 1996. About 9 out of 10 worked in elementary and secondary schools, mostly in the lower grades. A significant number assisted special education teachers in working with children who have disabilities. Most of the others worked in child daycare centers and religious organizations.

Training, Other Qualifications, and Advancement

Educational requirements for teacher aides range from a high school diploma to some college training. Aides with instructional responsibilities usually require more training than those who don't perform teaching tasks. Increasingly, employers prefer aides who have some college training. Some teacher aides are aspiring teachers who are working towards their degree while gaining experience. Many schools require previous experience in working with children. Schools may also require a valid driver's license, and perform a background check on applicants.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher aides. However, most teacher aides receive on-the-job training. Those who tutor and review lessons with students must have a thorough understanding of class materials and instructional methods, and should be familiar with the organization and operation of a school.

Teacher aides work with students individually or in small groups.

Aides also must know how to operate audiovisual equipment, keep records, and prepare instructional materials, as well as have adequate computer skills.

Teacher aides should enjoy working with children from a wide range of cultural backgrounds, and be able to handle classroom situations with fairness and patience. Aides also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good oral and writing skills and be able to communicate effectively with students and teachers. Teacher aides who speak a second language, especially Spanish, are in great demand to communicate with growing numbers of students and parents whose primary language is not English.

About half of all States have established guidelines or minimum educational standards for the hiring and training of teacher aides, and an increasing number of States are in the process of implementing them. Although requirements vary by State, most require an individual to have at least a high school diploma or general equivalency degree (G.E.D.), or some college training.

Advancement for teacher aides, usually in the form of higher earnings or increased responsibility, comes primarily with experience or additional education. Some school districts provide time away from the job or tuition reimbursement so that teacher aides can earn their bachelor's degrees and pursue licensed teaching positions. In return for tuition reimbursement, aides are often required to commit to teaching a certain length of time for the school district.

Job Outlook

Employment of teacher aides is expected to grow much faster than the average for all occupations through the year 2006. Student enrollments at the elementary and secondary level are expected to rise,

spurring strong demand for teacher aides to assist and monitor students and provide teachers with clerical assistance. Teacher aides will also be required to help teachers meet the educational needs of a growing special education population, particularly as these students are increasingly assimilated into general education classrooms. Education reform and the rising number of students who speak English as a second language will continue to contribute to the demand for teacher aides. In addition to jobs stemming from employment growth, numerous job openings will arise as workers transfer to other occupations, leave the labor force to assume family responsibilities, return to school, or leave for other reasons—characteristic of occupations that require limited formal education and offer relatively low pay.

The number of special education programs is growing in response to increasing enrollments of students with disabilities. Federal legislation mandates appropriate education for all children, and emphasizes placing disabled children into regular school settings, when possible. Children with special needs require much personal attention, and special education teachers, as well as general education teachers with special education students, rely heavily on teacher aides. At the secondary school level, teacher aides work with special education students as job coaches, and help students make the transition from school to work.

School reforms which call for more individual instruction should further enhance employment opportunities for teacher aides. Schools are hiring more teacher aides to provide students with the personal instruction and remedial education they need.

Teacher aide employment is sensitive to changes in State and local expenditures for education. Pressures on education budgets are greater in some States and localities than in others. A number of teacher aide positions, such as those in Head Start classrooms, are financed through Federal Government programs, which also may be affected by budget constraints.

Earnings

According to a survey of salaries in public schools, conducted by the Educational Research Service, aides involved in teaching activities averaged $9.04 an hour in 1995-96; those performing only non-teaching activities averaged $8.52 an hour. Earnings varied by region, work experience, and academic qualifications. About 3 out of 10 teacher aides belonged to unions in 1996—mainly the American Federation of Teachers and the National Education Association—which bargain with school systems over wages, hours, and the terms and conditions of employment.

Related Occupations

Teacher aides who instruct children have duties similar to those of preschool, elementary, and secondary school teachers and school librarians. However, teacher aides do not have the same level of responsibility or training. The support activities of teacher aides and their educational backgrounds are similar to those of child-care workers, family daycare providers, library technicians, and library assistants.

Sources of Additional Information

For information on teacher aides, including training and unionization, and on a wide range of education-related subjects, contact:

- American Federation of Teachers, Organizing Department, 555 New Jersey Ave. NW., Washington, DC 20001.

For information on a career as a teacher aide, contact:

- National Resource Center for Paraprofessionals in Education and Related Services, 25 West 43rd St., Room 620, New York, NY 10036.

School superintendents and State departments of education can provide details about employment requirements.

Clergy

(D.O.T. 120.107-010)

Nature of the Work

Religious beliefs—be they Buddhist, Christian, Jewish, Moslem, or based on some other religion—are significant influences in the lives of millions of Americans, and prompt many believers to participate in organizations that reinforce their faith. Even within a single religion many sects may exist, with each group having unique traditions and responsibilities for its clergy. For example, Christianity has over 70 denominations, while Judaism has 4 major branches, as well as groups within each branch, with diverse customs.

Clergy are religious and spiritual leaders, and teachers and interpreters of their traditions and faith. They organize and lead regular religious services and officiate at special ceremonies, including confirmations, weddings, and funerals. They may lead worshipers in prayer, administer sacraments, deliver sermons, and read from sacred texts such as the Bible, Talmud, or Koran. When not conducting worship services, clergy organize, supervise, and lead religious education programs for their congregations. Clergy often visit the sick or bereaved to provide comfort, and counsel persons who are seeking religious or moral guidance, or who are troubled by family or personal problems. They also may work to expand the membership of their congregations and solicit donations to support its activities and facilities.

Clergy serving large congregations often share their duties with associates or have more junior members of the clergy to assist them. They often spend considerable time on administrative duties. They oversee the management of buildings, order supplies, contract for services and repairs when necessary, and supervise the work of paid staff and volunteers. Clergy also work with committees and officials, elected by the congregation, who guide the management of the congregation's finances and real estate.

Working Conditions

Members of the clergy typically work long and irregular hours. In 1996, about 1 in 4 full-time clergy worked 60 or more hours a week, compared to only 1 in 14 workers in all professional specialty occupations. Although many of their activities are sedentary and intellectual in nature, they are frequently called upon at short notice to visit the sick, comfort the dying and their families, and provide counseling to those in need. Involvement in community, administrative, and educational activities may require clergy to work evenings, early mornings, holidays, and weekends.

Training and Other Qualifications

Educational requirements for entry into the clergy vary greatly. Similar to other professional occupations, about 3 out of 4 members of the clergy have completed at least a bachelor's degree. Many denominations require that clergy complete a bachelor's degree and a program of theological study; others will admit anyone who has been "called" to the vocation. Some sects do not allow women to become clergy. Those considering careers in the clergy should consult their religious leaders to verify specific entrance requirements.

Individuals considering a career in the clergy should realize they are choosing not only a career, but a way of life. In fact, a number of clergy remain in their chosen vocation throughout their lives; in 1996, 13 percent of clergy were 65 or older, compared to only 3 percent of workers in all professional specialty occupations. Religious leaders must exude confidence and motivation, while remaining tolerant and able to listen to the needs of others. They should be capable of making difficult decisions, working under pressure, and living up to the moral standards set by their faith and community.

The following statements provide more detailed information on Protestant ministers, Rabbis, and Roman Catholic priests.

Protestant Ministers

(D.O.T. 120.107-010)

Significant Points

- Entry requirements vary greatly; many denominations require a bachelor's degree followed by study at a theological school, while other denominations have no formal educational requirements.

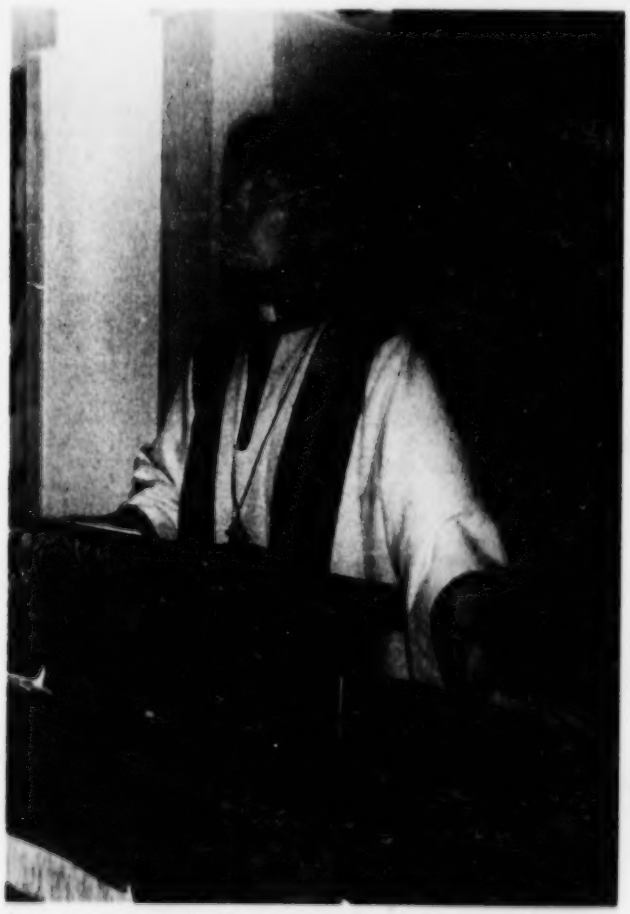
- Competition for positions is expected because of the large number of qualified candidates; the degree of competition will vary among denominations and geographic regions.

Nature of the Work

Protestant ministers lead their congregations in worship services and administer the various rites of the church, such as baptism, confirmation, and Holy Communion. The services ministers conduct differ among the numerous Protestant denominations, and even among congregations within a denomination. In many denominations, ministers follow a traditional order of worship; in others, they adapt the services to the needs of youth and other groups within the congregation. Most services include Bible reading, hymn singing, prayers, and a sermon. In some denominations, Bible reading by a member of the congregation and individual testimonials may constitute a large part of the service. In addition to these duties, ministers officiate at weddings, funerals, and other occasions.

Each Protestant denomination has its own hierarchical structure. Some ministers are responsible only to the congregation they serve, while others are assigned duties by elder ministers, or by the bishops of the diocese they serve. In some denominations, ministers are reassigned to a new pastorate by a central governing body or diocese every few years.

Ministers serving small congregations generally work personally with parishioners. Those serving large congregations may share specific aspects of the ministry with one or more associates or assistants, such as a minister of education who assists in educational programs for different age groups, or a minister of music.



Protestant ministers lead their congregations in prayer and song.

Employment

According to the National Council of Churches, there were over 300,000 Protestant ministers in 1996, including those who served without a regular congregation or worked in closely related fields, such as chaplains in hospitals, the Armed Forces, universities, and correctional institutions. While there are many denominations, most ministers are employed by the five largest Protestant bodies—Baptist, Episcopalian, Lutheran, Methodist, and Presbyterian.

Although most ministers are located in urban areas, many serve two or more small congregations in less densely populated areas. Some small churches increasingly are employing part-time ministers who may be seminary students, retired ministers, or holders of secular jobs. Unpaid pastors serve other churches with meager funds. Some churches employ specially trained members of the laity to conduct nonliturgical functions.

Training and Other Qualifications

Educational requirements for entry into the Protestant ministry vary greatly. Many denominations require, or at least strongly prefer, a bachelor's degree followed by study at a theological school. However, some denominations have no formal educational requirements, and others ordain persons having various types of training in Bible colleges or institutes, or liberal arts colleges. Many denominations now allow women to be ordained, but others do not. Persons considering a career in the ministry should first verify the entrance requirements with their particular denomination.

In general, each large denomination has its own schools of theology that reflect its particular doctrine, interests, and needs. However, many of these schools are open to students from other denominations. Several interdenominational schools associated with universities give both undergraduate and graduate training covering a wide range of theological points of view.

In 1996, about 150 American Protestant theological schools were accredited by the Association of Theological Schools in the United States and Canada. These only admit students who have received a bachelor's degree or its equivalent in liberal arts from an accredited college. After college graduation, many denominations require a 3-year course of professional study in one of these accredited schools, or seminaries for the degree of Master of Divinity.

The standard curriculum for accredited theological schools consists of four major categories: Biblical, historical, theological, and practical. Courses of a practical nature include pastoral care, preaching, religious education, and administration. Many accredited schools require that students work under the supervision of a faculty member or experienced minister. Some institutions offer Doctor of Ministry degrees to students who have completed additional study, usually 2 or more years, and served at least 2 years as a minister. Scholarships and loans are often available for students of theological institutions.

Persons who have denominational qualifications for the ministry usually are ordained after graduation from a seminary or after serving a probationary pastoral period. Denominations that do not require seminary training ordain clergy at various appointed times. Some evangelical churches may ordain ministers with only a high school education.

Men and women entering the clergy often begin their careers as pastors of small congregations or as assistant pastors in large churches. Pastor positions in large metropolitan areas or in large congregations often require many years of experience.

Job Outlook

Competition is expected to continue for paid Protestant ministers through the year 2006, reflecting slow growth of church membership and the large number of qualified candidates. Graduates of theological schools should have the best prospects. The degree of competition for paid positions will vary among denominations and geographic regions. For example, relatively favorable prospects are expected for ministers in evangelical churches. Competition will still be keen for more responsible positions serving large, urban congregations. Ministers willing to work part time or for smaller, rural congregations should have better opportunities. Most job openings will stem from the need to replace ministers who retire, die, or leave the ministry.

Employment alternatives for newly ordained Protestant ministers who are unable to find positions in parishes include working in youth counseling, family relations, and welfare organizations; teaching in religious educational institutions; and serving as chaplains in the Armed Forces, hospitals, universities, and correctional institutions.

Earnings

Salaries of Protestant clergy vary substantially, depending on experience, denomination, size and wealth of congregation, and geographic location. Based on limited information, the estimated average annual income of Protestant ministers was about $30,000 in 1996. In large, wealthier denominations, ministers often earned significantly higher salaries. Ministers with modest salaries typically earn additional income from employment in secular occupations.

Sources of Additional Information

Persons who are interested in entering the Protestant ministry should seek the counsel of a minister or church guidance worker. Theological schools can supply information on admission requirements. Prospective ministers should also contact the ordination supervision body of their particular denomination for information on special requirements for ordination.

Rabbis

(D.O.T. 120.107-010)

Significant Points

- Ordination usually requires completion of a college degree followed by a 4- or 5-year program at a Jewish seminary.
- Graduates of Jewish seminaries have good job prospects, reflecting current unmet needs for rabbis and the need to replace the many rabbis approaching retirement age.

Nature of the Work

Rabbis serve either Orthodox, Conservative, Reform, or Reconstructionist Jewish congregations. Regardless of their particular point of view, all preserve the substance of Jewish religious worship. Congregations differ in the extent to which they follow the traditional form of worship—for example, in the wearing of head coverings, the use of Hebrew as the language of prayer, or the use of instrumental music or a choir. The format of the worship service and, therefore, the ritual that the rabbi uses may vary even among congregations belonging to the same branch of Judaism.

Rabbis are more independent than other clergy, because there is no formal hierarchy in Judaism. Rabbis are only responsible to the Board of Trustees of the congregation they serve. Those serving large congregations may spend considerable time in administrative duties, working with their staffs and committees. Large congregations frequently have associate or assistant rabbis, who often serve as educational directors.

Rabbis also may write for religious and lay publications, and teach in theological seminaries, colleges, and universities.

Employment

Based on information from organizations representing the 4 major branches of Judaism, there were approximately 1,800 Reform, 1,250 Conservative, 1,000 Orthodox, and 250 Reconstructionist rabbis in 1996. Although the majority served congregations, many rabbis functioned in other settings. Some taught in Jewish studies programs at colleges and universities, while others served as chaplains in the military, hospitals, colleges, or one of the many Jewish community service agencies.

Although rabbis serve Jewish communities throughout the Nation, they are concentrated in major metropolitan areas with large Jewish populations.

Ordination as a rabbi requires many years of study.

Training and Other Qualifications

To become eligible for ordination as a rabbi, a student must complete a course of study in a seminary. Entrance requirements and the curriculum depend upon the branch of Judaism with which the seminary is associated. Most seminaries require applicants to be college graduates.

Jewish seminaries typically take 5 years for completion of studies, with an additional preparatory year required for students without sufficient grounding in Hebrew and Jewish studies. In addition to the core academic program, training generally includes field work and internships providing hands-on experience and, in some cases, study in Jerusalem. Seminary graduates are awarded the title Rabbi and the Master of Arts in Hebrew Letters degree; after more advanced study, some earn the Doctor of Hebrew Letters degree.

In general, the curriculums of Jewish theological seminaries provide students with a comprehensive knowledge of the Bible, Talmud, Rabbinic literature, Jewish history, theology, and courses in education, pastoral psychology, and public speaking. Students receive extensive practical training in dealing with social problems in the community. Training for alternatives to the pulpit, such as leadership in community services and religious education, is increasingly stressed. Some seminaries grant advanced academic degrees in such fields as Biblical and Talmudic research. All Jewish theological seminaries make scholarships and loans available.

About 35 seminaries educate and ordain Orthodox rabbis. The Rabbi Isaac Elchanan Theological Seminary and the Beth Medrash Govoha Seminary are representative of the two basic kinds of Orthodox seminaries. The former requires a bachelor's degree for entry and has a formal 4-year ordination program. The latter has no formal admission requirements but may require more years of study for ordination. The training is rigorous. When students have become sufficiently learned in the Talmud, the Bible, and other religious studies, they may be ordained with the approval of an authorized rabbi, acting either independently or as a representative of a rabbinical seminary.

Other major rabbinical seminaries include the Jewish Theological Seminary of America, which educates rabbis for the Conservative branch; the Hebrew Union College—Jewish Institute of Religion, which educates rabbis for the Reform branch; and the Reconstructionist Rabbinical College, which educates rabbis in the newest branch of Judaism.

Newly ordained rabbis usually begin as spiritual leaders of small congregations, assistants to experienced rabbis, directors of Hillel

Foundations on college campuses, teachers in educational institutions, or chaplains in the Armed Forces. As a rule, experienced rabbis fill the pulpits of large and well-established Jewish congregations.

Job Outlook

Job opportunities for rabbis are expected to be favorable in the four major branches of Judaism through the year 2006, reflecting current unmet needs for rabbis together with the need to replace the many rabbis approaching retirement age. Rabbis willing to work in small communities should have particularly good prospects.

Graduates of Orthodox seminaries who seek pulpits should have good opportunities as growth in enrollments slows, and many graduates seek alternatives to the pulpit. Reconstructionist rabbis are expected to have very good employment opportunities as membership expands rapidly. Conservative and Reform rabbis are also expected to have good job opportunities serving congregations or in other settings.

Earnings

Based on limited information, annual average earnings of rabbis generally ranged from $45,000 to $75,000 in 1997, including benefits. Benefits may include housing, health insurance, and a retirement plan. Income varies widely, depending on the size and financial status of the congregation, as well as its denominational branch and geographic location. Rabbis may earn additional income from gifts or fees for officiating at ceremonies such as bar mitzvahs and weddings.

Sources of Additional Information

Persons who are interested in becoming rabbis should discuss their plans for a vocation with a practicing rabbi. Information on the work of rabbis and allied occupations can be obtained from:

- Rabbinical Council of America, 305 7th Ave., New York, NY 10001. (Orthodox)
- The Jewish Theological Seminary of America, 3080 Broadway, New York, NY 10027. (Conservative) Homepage: http://www.jtsa.edu
- Rabbinical Placement Commission, 192 Lexington Ave., New York, NY 10016. (Reform)
- Reconstructionist Rabbinical College, 1299 Church Rd., Wyncote, PA 19095.

Roman Catholic Priests

(D.O.T. 120.107-010)

Significant Points

- Preparation generally requires 8 years of study beyond high school, usually including a college degree followed by 4 years at a seminary.
- The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable outlook.

Nature of the Work

Roman Catholic priests attend to the spiritual, pastoral, moral, and educational needs of the members of their church. A priest's day usually begins with morning meditation and mass and may end with an individual counseling session or an evening visit to a hospital or home. Many priests direct and serve on church committees, work in civic and charitable organizations, and assist in community projects. Some counsel parishioners preparing for marriage or the birth of a child.

Priests in the Catholic church belong to one of two groups—diocesan or religious. Both types of priests have the same powers, acquired through ordination by a bishop. Their differences lie in their way of life, their type of work, and the church authority to whom they are responsible. *Diocesan priests* commit their lives to serving the people of a diocese, a church administrative region, and generally work in parishes assigned by the bishop of their diocese. Diocesan priests make promises of celibacy and obedience. *Religious priests* belong to a religious order, such as the Jesuits, Dominicans, or Franciscans. Religious priests are assigned duties by their superiors in their respective religious orders. Some religious priests specialize in teaching, while others serve as missionaries in foreign countries, where they may live under difficult and primitive conditions. Others live a communal life in monasteries, where they devote their lives to prayer, study, and assigned work. Religious priests take vows of chastity, poverty, and obedience.

Both religious and diocesan priests hold teaching and administrative posts in Catholic seminaries, colleges and universities, and high schools. Priests attached to religious orders staff a large proportion of the church's institutions of higher education and many high schools, whereas diocesan priests are usually concerned with the parochial schools attached to parish churches and with diocesan high schools. The members of religious orders do most of the missionary work conducted by the Catholic Church in this country and abroad.

Employment

According to the Official Catholic Directory, there were approximately 49,000 priests in 1996, about two-thirds were diocesan priests. There are priests in nearly every city and town and in many rural communities; however, the majority are in metropolitan areas, where most Catholics reside. Large numbers of priests are located in communities near Catholic schools, hospitals, social service agencies, and other institutions.

Training and Other Qualifications

Preparation for the priesthood generally requires 8 years of study beyond high school, usually including a college degree followed by 4 years at a seminary. There are 198 seminaries—72 for diocesan priests and 126 for religious priests. Priests commit themselves to celibacy, remaining unmarried. Only men are ordained as priests; women serve in other church positions that do not require priestly ordination.

Preparatory study for the priesthood may begin either in the first year of high school, at the college level, or in theological seminaries after college graduation. Today, most candidates for the priesthood take a 4-year degree program at a conventional college or university. After graduation from college, candidates generally receive 1 or 2 years of preparatory study (philosophy, religious studies, and prayer) before entering the seminary. Theology coursework in the seminary includes sacred scripture; dogmatic, moral, and pastoral theology; homiletics (art of preaching); church history; liturgy (sacraments); and canon (church) law. Fieldwork experience is usually required; in recent years, this aspect of a priest's training has been emphasized. Diocesan and religious priests attend different major seminaries, where slight variations in the training reflect the differences in their duties.

According to the U.S. Bishops Conference, 10 high school seminaries provided a college preparatory program in 1996. Programs emphasize English grammar, speech, literature, and social studies. Latin may be required, and modern languages are encouraged. In Hispanic communities, knowledge of Spanish is mandatory.

Young men are never denied entry into seminaries because of lack of funds. In seminaries for secular priests, scholarships or loans are available. Those in religious seminaries are financed by contributions of benefactors and the Catholic Church.

Postgraduate work in theology is offered at a number of American Catholic universities or at ecclesiastical universities around the world, particularly in Rome. Also, many priests do graduate work in fields unrelated to theology. Priests are encouraged by the Catholic Church to continue their studies, at least informally, after ordination. In recent years, continuing education for ordained priests has stressed social sciences, such as sociology and psychology.

A newly ordained secular priest usually works as an assistant pastor. Newly ordained priests of religious orders are assigned to the specialized duties for which they are trained. Depending on the talents, interests, and experience of the individual, many opportunities for greater responsibility exist within the church.

Some priests teach in Catholic high schools and colleges and universities.

Job Outlook

The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable job outlook through the year 2006. Many priests will be needed in the years ahead to provide for the spiritual, educational, and social needs of the increasing number of Catholics. In recent years, the number of ordained priests has been insufficient to fill the needs of newly established parishes and other Catholic institutions, and to replace priests who retire, die, or leave the priesthood. This situation is likely to continue—even if the recent modest increase in seminary enrollments continues—as an increasing proportion of priests approach retirement age.

In response to the shortage of priests, certain traditional functions increasingly are being performed by permanent deacons and by teams of clergy and laity. Throughout most of the country, permanent deacons have been ordained to preach and perform liturgical functions such as baptisms, marriages, and funerals, and provide service to the community. Deacons are not authorized to celebrate Mass, nor administer the Sacraments of Reconciliation and the Anointing of the Sick. Teams of clergy and laity undertake some liturgical and nonliturgical functions such as hospital visits and religious teaching.

Earnings

Diocesan priests' salaries vary from diocese to diocese. Based on limited information, salaries averaged about $11,000 in 1996. In addition to a salary, diocesan priests receive a package of benefits which may include a car allowance, room and board in the parish rectory, health insurance, and a retirement plan.

Priests who do special work related to the church, such as teaching, usually receive a partial salary which is less than a lay person in the same position would receive. The difference between the usual salary for these jobs and the salary that the priest receives is called "contributed service." In some of these situations, housing and related expenses may be provided; in other cases, the priest must make his own arrangements. Some priests doing special work receive the same compensation that a lay person would receive.

Religious priests take a vow of poverty and are supported by their religious order. Any personal earnings are given to the order. Their vow of poverty is recognized by the Internal Revenue Service, which exempts them from paying Federal income tax.

Sources of Additional Information

Young men interested in entering the priesthood should seek the guidance and counsel of their parish priests and diocesan vocational office. For information regarding the different religious orders and the diocesan priesthood, as well as a list of the seminaries which prepare students for the priesthood, contact the diocesan director of vocations through the office of the local pastor or bishop.

Individuals seeking additional information about careers in the Catholic Ministry should contact their local diocese.

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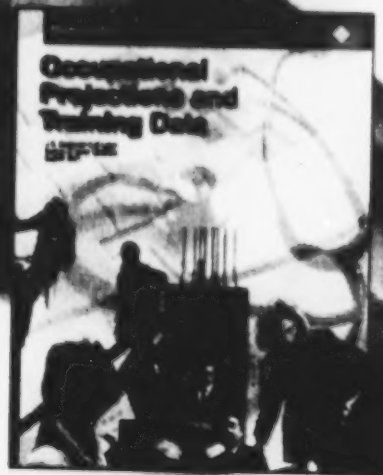

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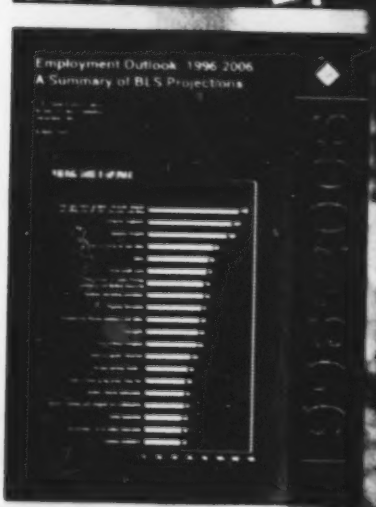

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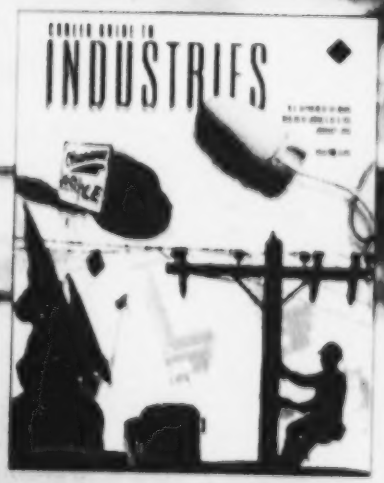

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